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ORIGINAL ARTICLES.

THE NEW SCIENCE OF MEDICINE.

[Being the Doctorate address delivered at the Forty-first Annual Commencement Exercises of Rush Medical College, February 19, 1884.]

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Graduation day is an epoch in the life of a man. To the reflecting mind it is crowded with suggestions for thought, while to many it is full of the romantic and of castles in the air. To all who graduate this thought comes, that the world still has for us subjects for study, which, up to this point, we have been unable to touch.

The undergraduate's experience in a medical college is sober and fatiguing. In acquiring the medical degree we have studied the science and art of medicine as represented in certain books; by means of lectures and quizzes, by laboratory exercises and practical work; and by the observation and contact of the sick. So far our work has been one of preparation in a very direct and practical way for a particular present object and for a larger ulterior purpose in the labor of life.

Necessarily many subjects of great interest and quite essential to the fully equipped man have been neglected. One of these is the history of medicine.

The several branches of medicine and surgery have been given to us out of condensed text books or out of the mouths of teachers, and as to portions of them, whether they are new or old, we might often be in doubt.

Both the text-books and the teacher have been obliged to be, in the main, silent as to when and where all this mass of facts became known, how the science grew and developed; where it came from: whether it did not, some of it, drop down from the clouds full grown.

No one can even approach the study of the history of medicine, without being forcibly impressed by the great number of differing views and theories that have been held in the past.

Even before our pupilage began we knew—no observing person fails to know—that doctors disagree, and that there have been so-called schools or sects of medicine for a very long time. In our early studies too it was a perplexity to our minds how there could be so much disagreement and yet any truth or foundation facts in medicine at all. And we may have been even worried by some lack of agreement among the faculty who taught us.

It is only by mental growth that we appreciate fully that on every subject on which men think there are and must be various opinions. Men thoroughly agree on no subject that seriously engages their study. This is a fact in the history of thought and in the composition and physiology of the mind. Brains and minds differing, men who think must disagree more or less. Religion, politics and all the arts and sciences have, since the beginning of history, been perpetual examples of this truth.

When a man reaches the serene belief that his views are past improvement, he ceases to reason further, and gives himself up to the exercise of faith and is happy.

There is an innate property of the mind, varying in different individuals, which manifests itself in a desire for more knowledge and better methods, both for the love of innovation and for the practical results that may follow. In a few minds among the multitude this is a dominating impulse. These are restless spirits; experimenters, innovators, who hate present ways and things, if better are possible. It is through the labor and thought of such minds that the arts and sciences and all thought have progressed through the ages.

In many directions the progress has been slow, and successive contributions have added to what already existed and a gradual moulding and a steady growth have ensued. Politics, the law and religion are examples in point. In the arts and sciences, however, progress has been made in a very different way. Here growth has been marked by occasional long strides, and a single step has often changed a science or revolutionized an art. Each great step has added something and destroyed much. The record is one long story of iconoclasm. An important discovery has often been less startling to the minds of men than the crash of cherished idols which it has caused. A new fact disturbs the foundations of existing ideas and theories and compels the recasting of a science. Thus chemistry, physiology and pathology have with fresh additions, become new sciences. The discovery of oxygen destroyed a hundred beautiful theories. The Copernican theory threw into commotion the old philosophers who saw their doctrines of the construction of the universe tottering.

The discovery of the circulation of the blood had a hard struggle, against the beliefs of the time, for recognition. It was necessary to surrender all the accumulation of alleged science with which it conflicted. This was sacrilege to the old doctors and they fought against the innovation, automatically. Every discovery that has run against any long held notions has encountered the same mental automatism on the part of those who ought to welcome every new truth. But with hesitation and haltings, and in the face of difficulties, progress has been made, step by step, in all sciences, and not least in that of medicine.

Of old, when medicine was mostly theory and hypothesis, all the doctors naturally ranged themselves into sects and schools, each held together by some dogma. As the inductive method of study came into vogue gradually the sects became fewer, till now they have, among the real students, nearly disappeared.

The schools, as well as the laity, have thought they found it necessary to designate by some name the students of medicine who, since they study this as they would any other science, can belong to no sect. As these are of the race of the seekers after demonstrable truth through all time, they have been called the "*old school.*" Physicians who believe the science of medicine is too broad and grand to be labeled by the name of a sect, are continually referred to as the "old school," as though they must be ancient in thought and practice—the very type of fossilization.

But the public is not alone in confusing the profession of to-day with that of a period long past. Many within the profession are unable to free themselves from the notion that they belong to some ancient order, in thought as well as name. They worship the past. Writers of medical books affect erudition by a familiarity with the medicine of the ancients, and quote what Hippocrates and Galen believed on a particular point, as though it was of the smallest practical consequence to us what they believed. We all regard with pride the honorable position of our profession at times in the past, and applaud its fidelity to the cardinal principles of ethics. We point to the oath of Hippocrates and say: "behold what manner of man the physician was before the Christian era." For more than twenty centuries the rules of conduct of our guild have not changed.

But human nature and weaknesses are the same in all ages, and the principles of ethics endure forever. Plato and Emerson sang the same song, only in different tongues and to different listeners.

The glory of the ancient profession is that it did grope after truth, and that it was loyal to the ethics of all time and loyal to the sick. The few facts of science which the ancient doctors gathered are but a handful to the harvest of this later day, while their errors about disease and their good-intentioned, but awful inflictions upon the sick for their supposed benefit, make a chapter that is positively sickening to contemplate. Volumes have been written to show the wisdom and knowledge of the ancient profession. I ask you to-day to contemplate how much of the science of medicine is the product of the closing century.

I would not say a word to lessen the glory of the early profession for its actual attainment and work. But it is a fact that the science of medicine as an agency that actively and forcefully aids mankind to live longer, with more comfort and less pain, and to recover from disease, is new. A hundred years ago the circulation of the blood had been known more than a century. Gross anatomy was well understood; this study had been advanced to a laudable degree. A few of the drugs of that day are among the most valuable in our materia medica, but most of them have long since fallen into neglect, and the few had not been studied systematically or scientifically as to their action.

When the idea originated that a substance to be medicinal must be disgusting I do not know, but it was early in the history of medicine. For the ancients vied with each other in search of things horrible to be called medicine. Down to the eighteenth century, in acknowledged use were the teeth of boars; the jawbones of fishes; powders of blood from various animals; excrements of animals and people; flesh of human beings and animals, and from particular parts of the body for particular diseases.

The appearances and symptoms of many diseases were well described many centuries ago. Ignorant of pathology, the ancients had devoted the most patient study to symptoms, and in this particular some of their descriptions are masterpieces.

The practice of medicine in early times was based almost entirely upon absurd theories of the nature of disease. Disease was due to the astral influence of the planets, Saturn, Jupiter and Mars. Or it was a depraved condition of the humors, called cacochymia—a humoral pathology that was like the play of fancy to children. Another theory was that all diseases had their origin in the soul.

The doctors were divided into contending sects, each of which generally had a single potion or measure of treatment, which was its only resource. One sect tried to cure all complaints by cataplasms; with another wine was the only remedy; plasters and ointments constituted the armamentarium of another; a fourth used oils and wool externally, various potions internally, and charms generally; while a fifth are said, by way of contrast, to have been "ignorant practitioners" and "silly old women." But, as already shown, it is not possible to break away entirely from what we are pleased to call the delusions of the ancients. Mental tendencies were the same a thousand years ago as now, and promise to remain the same through all time, and nothing shows this more than that men *tend* to think and believe in the same fashion in all ages. Thus a great and learned physician of the fifth century recommends for epilepsy a charm consisting of the nail taken from the arm of a malefactor who had been crucified. To cure a stye, "the points of nine barleycorns were to be rubbed upon the part," and on each application were to be uttered the words, "*Fuge, fuge, Koithe se diokis.*" But if the stye was on the right eye it was to be rubbed with three fingers of the left hand, three

times the patient was to spit, and three times to utter: "*Nec mula porit, nec lapis lanam fert,*" etc. The educated "veteran leader" of a modern sect of physicians, writing less than ten years ago, says that in typhoid fever, if a patient desires to get out of bed, give him bryonia; if to change beds, arsenicum; if to escape from bed, belladonna; if to jump out of bed, hyoscyamus; but if he springs up from bed suddenly he must have bel. and nux. For "pain in the joint of the lower jaw give baptesia; for dropping of the jaw, luchnau; for falling of the jaw, arsenicum; for hanging of the jaw, lycopodium, mur. ac., etc.; and for sunken jaw give secale." Thus the fifth century and now![1]

Medicine, as a consistent, coherent science, could not exist till the nature and composition of substances could be intelligently studied and the minute structure of bodies explored. It had been patiently waiting for two aids, the key to the science of chemistry and the means of seeing the universe of the minute. One of them came a little over a century ago in the discovery of oxygen. This explained a thousand problems, opened a vast field for research, and was the key to the chemistry of the animal body. The atomic theory came naturally after the discovery of oxygen, and from this point chemistry made rapid growth. Chemistry is so vital a part of our medical science that it may truly be said that without it the science of medicine of to-day would be non-existent; nor will it do to compare modern chemistry with ancient chemistry. The ancients had no chemistry. Modern chemistry is all there is, and it can only be contrasted with the midnight darkness of the days of alchemy.

The gross anatomy of the eighteenth century had left little to be added in that direction. But the minute anatomy of the human body, of animals and plants, was well-nigh a sealed book. This field was waiting for the perfection of the microscope, and this instrument, for effective use, may almost be said to have been born in the present century.

The medicine of to-day depends upon histology, and the microscope was the road and the way to this study.

Take away from medicine the achievements of the microscope, and we should lose our knowledge of the structure of the tissues, the function and behavior of the cell in all its manifold forms, mutations, and migrations; the vast subject of cellular pathology; all the parasites and parasitic affections; the history and behavior of the micro-organisms of disease, and many other quite as vital parts of the science.

Within the century our knowledge of nearly every disease of common occurrence has been greatly enlarged by microscopical and chemical study of the organs involved, and their products, and by comparison with conditions of health.

Before the microscope we were in deep ignorance of nearly all the diseases of the kidneys, and of many disorders and symptoms which they produce. The discovery by Dr. Bright of the true nature of some of the disorders known by his name, and other discoveries in the same direction, have given us a fair insight into the diseases of these organs.

The present practice for the relief of these maladies is all based on recent discoveries. None of it is ancient, or even old. By practical hygiene, another modern department of medicine, many cases of Bright's Disease are relieved or held in dormancy for years.

A century ago, typhoid fever was confounded with several totally different affections, one of which was the contagious and very fatal typhus fever. Now it is established that typhoid fever is not contagious at all; that it is a disease of the intestines, and that it runs its course as regularly as does small-pox, in the main, regardless of treatment.

With the better understanding of this disease has come treatment that is more rational and more successful. Formerly the mortality was very high; forty years ago it was probably 18 to 20 per cent. of the cases. Now the per cent. of deaths is 10 to 12.

More than fifty parasites attack the human body. Each variety produces symptoms which we call a disease. Nearly all the knowledge we have of the parasites and of the symptoms has been acquired since the advent of the microscope, and is thus thoroughly modern.

The sickness produced by the trichina spiralis has existed for two centuries—probably much longer. It was confounded with typhus fever; it was called dropsy, epidemic erythema, epidemic œdema, and other names quite as unintelligible. Twenty years ago the microscope swept away the fog, and we behold a little worm coiled up in a muscle. Following closely upon this discovery came, most naturally, the annunciation: Cook your pork in every part, and no trichiniasis. In the study of other parasitic diseases, quite as much progress has been made as in this.

Almost the whole of the now most formidable department of cutaneous medicine—which deals largely with these parasites—is the growth of the present century. It could not be the product of a time before the microscope.

The achievement with which the century began was the discovery of vaccination.

In every civilized community the world over it has entirely changed the practice as to the *variolous* diseases. Its benefits have been incalculable. Although attacked by all shades of fanatics, it has saved and is destined to save thousands of lives, and it has relieved mankind from measureless anxiety and regret.

Near the middle of the century artificial anæsthesia was accomplished, by the use of nitrous oxide, ether, and chloroform.

This must remain through all time a marvel of discovery and invention. That it is possible to produce such a phenomenon as anæsthesia artificially is a marvel, and it is amazing that, being possible, the means for its easy, controllable and safe accomplishment should have been found. The lessening of suffering and the saving of life which this discovery has induced have been the talk of a generation. Not only is the current practice of surgery and medicine adapted to the use of anæsthesia, but, what is frequently overlooked, anæsthesia has broadened the

[1] Russell, p. 96.

field of operative surgery, by making many operations possible which without it could never be made.

Hygiene or sanitary science, the most beneficent in saving life, and in prolonging it the most potent, is a thing of comparatively recent years. It is a new revelation. Most of its facts and laws are the fruit of years that living men remember.

It has reduced the danger of death from certain diseases; with it alone certain diseases, formerly thought dangerous, are self-limited and without danger, and it has caused the average human life to increase in length.

Through organized efforts in society it has lessened the ravages of epidemics in many cases, and warded them off in others.

Never before did it enter so intimately and so thoroughly into the daily practice of the doctor as it does now.

If there is a single feature that, more than another, distinguishes the practice of the present from that of a former time, it is the use of numerous instruments of precision. Nearly all these instruments are the product of the present period.

The stethoscope and pleximeter, and the use of them in auscultation and percussion, are all modern, and these methods of study of the diseases and conditions of the thorax and abdomen are now everywhere used. Nobody now even professes to prescribe intelligently for diseases of the chest without the aid of auscultation and percussion.

The clinical thermometer was known three centuries ago. It was neglected till about ninety years since, and has of late grown into such favor that now it is used by the profession almost without exception. Whether it is of as much value as is claimed may well be questioned, but it has grown into the methods of thought and into the literature of the profession to such a degree that now no man would think of reporting a case of acute sickness for a first-class medical journal without giving the records of the thermometer.

The ophthalmoscope, invented a few years ago for the study of diseases of the eye, and now quite indispensable in that branch of work, has overstepped its original field, and is fast coming to be indispensable in any thorough study of diseases of the brain.

The diseases of the ear cannot now be diagnosed without the otoscope, yet this instrument is not fifty years old.

The laryngoscope and rhinoscope are the newest of modern inventions, and have made a new art of the treatment of the larynx and nasal cavity.

The hypodermic syringe as an instrument of exploration is emphatically one of precision, and it is refreshing to see it coming into vogue in this direction.

The dynamometer and æsthesiometer are in daily use, while we have to aid us as occasion demands; the sphygmograph and the cardiograph, the thoracometer, stethograph, spirometer and pneumatometer, the hæmacytometer, the perimeter, the palorimeter, the sacchorimeter, and never to be omitted, the urinometer, the test-tube, and the microscope, to say nothing of a half dozen others occasionally used, and a multitude of specula for exploration of the internal organs of the body.

Hypodermic medication has come into general use within our own memory, and now nearly every practitioner carries his hypodermic syringe. It enables him often to give relief and comfort more promptly and surely than by other methods, and it has enlarged the field of his resources, for it frequently happens that by this means he can give a remedy and save a life when all other expedients have failed.

In 1850 and afterward, Dr. Bowditch, of Boston, compelled the profession to believe, what they believed with reluctance, that serum and pus in the thoracic cavity may be safely evacuated. He employed for the purpose a trocar and tube to which was attached a pump. This we have amplified in the aspirator of to-day, which is extensively used for evacuating fluid from all sorts of natural and unnatural cavities to the saving of manifold valuable lives. Few instruments ever invented have in the same time had the fortune to accomplish so much for good, while doing so little harm, as this.

The expression, abdominal surgery, has a meaning that is entirely modern.

To have learned that the abdominal cavity may be opened with comparative safety, and to have done ovariotomy thousands of times, as well as other formidable operations upon the abdomen, with a large majority of successful results, would appear to be glory enough for a century. But the splendor of the achievement cannot be appreciated till we attempt to compute the saving of life in years. It was probably fully ten years ago that the scholarly Peaslee wrote these words: "It may be shown that in the United States and Great Britain alone, ovariotomy has, within the last 30 years, directly or indirectly, contributed more than 30,000 years to the active life of woman, all of which would have been lost had ovariotomy never been performed." And it reads like a fairy tale or the story of a dream that Keith, of Edinburgh, has done this operation a hundred times successively with only three deaths, and more than sixty times successively without a fatal case.

Before the modern period, the reduction of some of the more formidable dislocations was clumsy, difficult and often barbarous. The surgeon, with his retinue of robust assistants and his block and tackle for multiplying power, as he went to a case of this kind, suggested a gathering in the olden time for raising the timbers of a building. The tackle and block were used for pulling the joint into place, and the performance resembled a refined form of ancient torture by which the victim was torn asunder.

Now, by the simple and rational method of manipulation these dislocations are reduced by the easy movement of the surgeon's hands, without ado, without pulleys, and without torture:

Two pictures are brought to my mind vividly by this topic—one of childhood, the other of the present. The first is the picture of an aged and beloved woman who had sustained an injury of the hip. Just the nature of the lesion was uncertain, but it was recent, and she received the delicate attentions of the

pulleys for an hour or more without anæsthesia, when, from sheer pity, those responsible for her, begged that she be allowed to die if she must without being rent in twain. She was a cripple the few remaining years of her life.

The other picture is of an humble woman here in Chicago, and of her eloquent tribute to rational surgery. Her ehild had received some injury of one of its bones. She sent for a surgeon. It was night; and he returned word that she must call some other doctor. Again she sent, begging him to come; again he refused. She did not call another attendant, but watched by her charge till daylight, and then made her way to the surgeon's house, and with ineffable pathos begged him "for the love o' God" to come to her child. Prompted by curiosity, he asked her to tell him why she had allowed her child to go unattended all night rather than call another surgeon? "When I was a girl," said she, "I saw enough of common doctors for bones. My poor father put out his hip, and the doctors came and nearly killed him a pulling him with ropes all night, and then could not set it. In the morning a doctor o' the name o' Brainard came. I s'pose you never heard of him; he died a long time ago, but he was a great surgent, and he took the leg in his hands and turned it first one way and then the other, and so easy all the time, and it just went in with a snap."

In the departments of ophthalmology and otology the most remarkable advances have been made within fifty years.

Till the invention of the ophthalmoscope by Helmholz there was only a misty sort of knowledge of the diseases of the inside of the eye, and it was impossible to diagnose any of them. Now their discovery is easy and certain.

The subject of errors of refraction and their corrections has, chiefly by the labors of Donders, been placed on a "basis of mathematical demonstration" that seems unlikely to be disturbed by future researches.

No branch of medicine has grown more in favor and usefulness in a hundred years than dentistry. Preservation of the teeth has come to be almost synonymous with preservation of health, and the converse is strictly true, no good health with bad teeth. Dentistry is all modern; it cannot even plead age for the sake of respectability.

Antiseptic surgery is the last great achievement and the present wonder of medicine. It is all so recent and fresh in the minds of all students that either a description of it, or extended reference to its advantages, is not called for here. To a friend who, a few weeks ago, visited Prof. Nussbaum of Munich, the latter said, that during the forty years preceding 1876, at all times there was pyæmia in the Hospital of Munich, and during 1875, of the surgical cases 87 per cent. had hospital gangrene, and a large percentage died. From the introduction of antiseptic surgery in 1876, they have not had a case of gangrene, and pyæmia is almost unknown.

Dr. Weir, of New York, only last month called attention anew to the fact, that formerly the mortality from compound fractures was from 26 to 60 per cent. Now, by antiseptic management, the death rate from these injuries is reduced to 6 per cent., and by some surgeons this figure is even lowered.

Litholapaxy is a surgical procedure, introduced very recently by Prof. Bigelow of Boston, which threatens to supersede other methods of dealing with vesical calculus.

Bloodless surgery is another new realization whereby, with the rubber bandage, the surgeon is enabled to do many operations more easily, quickly, and successfully than formerly, as well as to avoid the loss of blood.

More different splints and appliances than could be named in an hour have, within my memory, been invented for the purpose of giving comfort to surgical patients and efficiency to their treatment.

One of the most beneficient and humane departments of surgery is that which deals with deformities of the body. Orthopædic surgery has hardly attained its majority in years, but it has accomplished a work in the relief of the crippled, and correction of deformities, as well as in the saving of life, that deserves the perpetual gratitude of mankind.

Electro-therapeutics is each year more and more becoming a recognized and necessary aid in the practice of medicine and surgery. Of course it is not new, but its recognition as having a legitimate field of usefulness, and the careful survey of that field, are the work of the last thirty years. In the hands of the profession it is, then, a new science.

The practice of medicine and surgery was never before on so rational a basis as it is now. Never before were practitioners so careful to do those things for the sick that are known to be helpful, and to refrain from everything else. Meddlesome practice—which means unnecessary, if not harmful practice—was never in such disfavor as it is to-day, to the unutterable gain of suffering humanity.

The most common condition of sickness that physicians are called to is that of fever. The modern methods of treating this state differ from the old very widely, in ministering more to the comfort of the patients, in attempts to reduce excessive heat, and in the free use of water for both of these purposes.

It is a recent discovery—and one made possible by modern means of investigation—that high temperature alone is a source of danger to the tissues, and puts the patient in peril if long continued. By various means, only lately well established, most high temperatures may be reduced without harm, and usually without discomfort, and by these methods the mortality from febrile diseases is perceptibly lessened.

Rest of the disordered organs, now rapidly growing in favor, as a systematic process in treatment to be emphasized, is quite new. Modern methods enable us to know much more exactly than formerly the organs diseased, and physiological chemistry and mechanical ingenuity have put us in possession of means not previously known whereby the labor of an organ may be dispensed with.

Now, dyspepsia, inflammation of the stomach, intestines, lungs, pleura and liver, Bright's Disease, typhoid fever, all the results of injury and many other

conditions of sickness are powerfully alleviated by this process.

How to put the sick part at rest as far as is possible, and cause the other organs of the body to still carry on the processes of life with the diseased organs out of duty, is a new art, as it is a very grand one.

Within a century a multitude of medicinal agents now in constant use, have either been discovered or come into favor for purposes that are new. Quite as many have been consigned to forgetfulness. Quinine, ether, chloroform, chloral, salicylic acid, ipecacuanha, the bromides, cannabis indica, carbolic acid, iodoform, corrosive sublimate, podophyllin, jequirity, duboisia, eserine, nitrite of amyl, veratrum viride, aconite and ergot, with a hundred more have swelled the resources of the art.

Probably in the choice of medicines on which to rely the profession has not always been wise, but the choice has been made, and fixes on the therapeutics of the day the stamp of newness.

In many more directions than I have cited may medicine, as it is now practiced, be shown to be modern. In science it is recent, in methods it is new. Verily it is a new profession into which you, gentlemen, have to-day been inducted.

Let it not be inferred from these laudations of the work of this century that we have occasion to rest or be satisfied. There is a great, undiscovered country in science. That misty domain holds a thousand secrets of the cause, nature and remedy of disease. The whole class of zymotic diseases, often now referred to as preventable diseases, because, I suppose, we *ought* to be able to prevent them, and many others which cut us off early and refuse to let us die of old age—all these have waited long and still wait a solution.

Medical education partakes of the spirit of progress and is modern. It differs widely now from what it was formerly. Among us the change has been greater than in the older countries. There innovations come slowly, but change has come everywhere. Of old the writings on medicine were all in Latin. Every liberally educated physician was obliged to spend years in study to become able to read and write this language readily. The literary was the major part of his education; it was the least useful directly, and it took the place of science. Science was poor in facts worth knowing, and yet the student must learn a new language before he could read the little of science there was. No northern tongue was fit to be the bearer of such knowledge. Now we reverse the order. Science is rich and nothing can usurp her place; any language is fit to convey her treasures to us, and it is wastefulness of human energy and time to learn science by a hard method and a rugged road when there are easier ways.

Literary studies are only blessed tools and instruments. I know a great discussion of the last decade in this country has been medical education, and that there are plentiful complaints that it is defective. Both in and out of the profession the question has been widely agitated, and the complaints are, many of them, just. The standard ought to be raised, particularly in the matter of study and drill preparatory to the medical college course. The medical course itself ought to be improved by the addition of more practical work and observations.

The agitation has provoked an improvement, so that to-day the curricula and requirements of the best colleges in this country are higher than they were ten years ago. But the claim that because the undergraduate period of the last century was longer than ours, therefore these modern times have fallen into degeneracy, is not good. The educational methods of the ancients can be no guide for us. With them the term of study was long by reason of the literary incubus already referred to. There never was a time before when so much of the *science* of medicine was taught and learned during the undergraduate period as now.

The medical heroes of antiquity wrote medical books by the hundred. Beyond the anatomy and some descriptions of disease, they are most of them as truly rubbish as the stories of the alchemists—to be read by those who have the leisure as historical curiosities. In a single term of college now, a student learns more of the essential science of medicine than all the medical tomes of antiquity contain.

Bad as our course of study may be, if a long course was ever exchanged for a short one to the unspeakable advantage of everybody concerned, it was in this instance.

As to the course of study in your Alma Mater, she does not pretend that it is perfect; she does not believe any course can be perfect, and therefore does not even undertake to establish one that will be permanent and not change. In the past her course of study has changed, and it will doubtless change in the future, as the needs of the public and the profession seem to require.

The college has had in your behalf a higher purpose than merely to have you earn and receive the degree of Doctor of Medicine. She has worked, and wished, and hoped, and hopes to-day that you may become good practitioners and successful men. Hence the course of instruction has been practical in the extreme. It has been shorn of speculation and confined to demonstrated paths as far as possible, and it may have been barren of some fascinations on this account. But, mindful that the consummation of our efforts is to be useful doctors, and therefore true servants of the public and proper professional men, it has been the constant purpose of Rush College to make her courses of study contribute to this end. The experience of her alumni has completely vindicated this position. Scattered over many States and Territories of the Union, and in other lands, your fellow alumni have met with a success as physicians and surgeons that is phenomenal. No higher test of usefulness than this can be possible.

May the class of 1884 add to the honor and high standing of the alumni of the college! You, gentlemen, have as a class a peculiar responsibility, for, measured by the usual standards, your Alma Mater has found that your aggregate of attainments is higher than that of any recently preceding class. Cultivate a pride in your classes, in all that is best in the profession. Create for yourselves an ideal, and strive to

realize it in your lives. Let a few qualifications and adornments be indispensable. Your ideal is a constant student; his life at college has only intensified his ambition to study. He can observe a phenomenon himself and know it as well and truly as though he read of it in a book. Fertile in resources, he is never surprised or disconcerted. He is patient, attentive, and upright in his intercourse with his patients. He is a student outside of the field of medicine; a lover of literature and all the ennobling arts; a many-sided man, indeed. The public know him, not only as the highest type of good breeding, but as one who, throughout the years of life, is steadfast in rectitude and immovable in a high purpose; who is exemplary in industry and patient in waiting.

Such an ideal is possible, and it is possible for you to realize it.

TREATMENT OF RINGWORM WITHOUT EPILATION.

A CLINIC BY JOHN V. SHOEMAKER, M.D., IN THE PHILADELPHIA HOSPITAL FOR SKIN DISEASES.

[Reported by Charles S. Means, M.D.]

GENTLEMEN:—At the close of the last clinic, I pointed out to you the circular patches on the heads of these three children. The girl has two spots, the younger boy one, and the scalp of the older boy is entirely involved. The appearance and symptoms of these patches, together with the cause of their development, the pathological changes which had taken place in the hairs, their follicles and the skin, as well as the diagnosis, all received due consideration.

Before proceeding to the treatment of these patients, let me again recall the appearance of the fungus of this disease—the trichophyton in the specimens beneath the class microscopes, which will again be passed around for your inspection. Beneath the first microscope you will again see a hair filled with this growth, and under the second and third instruments are sections of the skin, showing how the epidermis, as well as the hair follicles deep down, are also invaded. The hair in the first specimen was taken from the acute case of the young girl, while the sections of skin in the other two were made from the older boy, having the ringworm for the last four years. Now that I have recalled an important part of this affection, the removal and thorough destruction of the parasite which has brought about these lesions should command our attention. In beginning the treatment these children should, if possible, be isolated, in order to prevent them from spreading the contagion. Constitutional treatment should next be administered, as the experience of several years has taught me that care and attention to the general system is a great factor in bringing about a more speedy change with topical remedies. Proper hygienic surroundings and the use of good, nutritious food are essential and necessary for their systemic effect. As the first two cases appear to lack nourishment, the following tonic and nutritious combination will no doubt be very advantageous: Compound syrup of the phosphates and the fluid extract of malt, two ounces of each, mix; two teaspoonfuls in water three times daily, after meals. In the third case, the boy is especially anæmic, and will respond to treatment much better by using one of the salts of iron internally. A most excellent preparation, particularly well borne by children, is the syrup of the lactate of iron, which will be ordered in two teaspoonful doses after meals. It is also of equal importance that the local treatment should be carefully and persistently carried out.

The failure of many local remedies to act is due often to the negligence and careless manner in which they are used by patients and attendants. Special apparel, towels, bed linen, combs and brushes, should be used, provided they can be obtained by these patients. During and after the treatment every thing used by the patient should be thoroughly cleansed by an anti-parasitic remedy. The hairs upon and around the diseased patches should never be disturbed either by cutting, shaving, epilating or endeavoring to extract them. I desire to refer especially to these points, which I have again and again dwelt upon for some years in my clinics, in the treatment of all vegetable parasitic affections of the skin.

While cutting the hair in this girl's case might expose more of the diseased surface, yet it would also make the hair shafts shorter, and the movement of applications over these short hairs will often add to the irritation. It will be no especial advantage to cut the hair to expose the diseased surface, as the same purpose can be accomplished by separating the hairs and making the application. Shaving the hair is for the same reason a disadvantage, and will often cause cuts and abrasions of the skin which will increase the ravages of the parasite. Epilation is even more useless, and is painful and tedious to perform. I have ceased to resort to it, and find that vegetable parasitic affections improve much better without it. I believe I was the first to treat ringworm and other parasitic diseases of the same class *without epilation*. I commenced my new departure from the old method of extracting the hair laid down in all the text-books some years ago in a discussion before the Philadelphia County Medical Society, which can be found in the proceedings published by that organization. Look at those microscopic specimens now passing around the class, see how the hair and follicles are invaded with the fungus growth, and tell me if you could successfully extract such diseased hairs. The fungus has made the hairs brittle, and they will break off upon an attempt to extract them either on the surface or beneath in the follicle. The diseased hair or a part of it remains, and the parasite continues its ravages, even more active, owing to the irritation set up by an attempt to remove the hair. The wisest and best course in all cases will be to leave the hair undisturbed.

I will recommend that the heads of these children be washed every day or two with the following anti-parasitic mixture: One ounce and a half each of

sulphuric ether and alcohol, with ten grains of thymol. Another good remedy to use in place of the latter in the same mixture is boracic acid, or dilute sulphurous acid alone can be sponged over the parts once in two days. Cleanliness can be carried out perfectly by using one or the other of the preparations just enumerated. I would advise that no water be applied to these patches until all evidence of the disease has disappeared. Water applied to the surface of the skin places the organic carbon compounds in a more favorable state for the nutrition of the parasite. In addition to the mixture just mentioned to keep the parts clean, I will order for the first and second cases the copper oleate ointment in the proportion of thirty grains of the salt, to one half an ounce of recent lard. The patches should be rubbed two or three times a day with this ointment until all evidence of the disease has disappeared, and the parasite cannot be detected by the microscope. This remedy, which I have used very largely and successfully, was reported two years ago for the first time in a paper to the Pennsylvania State Medical Society. It has the power not only of destroying the parasite upon the surface, but also deep down in the follicle.

In the third case, the boy having the ringworm over the entire scalp, which is covered with abrasions and deep infiltration of four years' standing, I used the mercury oleate ointment; 20 per cent. has been used for the past six days with great benefit to the parts. The same application will be continued; the attendant being instructed to rub in the half an ounce of 20 per cent. mercury oleate ointment every day. The latter remedy has been selected in order to lessen the great infiltration of the parts, as well as to destroy the vegetable parasite. You need not fear to use such a large quantity of strong mercury oleate ointment. I have and am now applying this oleate in even a larger quantity and a stronger per cent. over the scalp in ringworm and upon the general surface of the skin, without the least untoward effect. I have yet to see with the use of the mercury oleate ointment the first case of salivation.

BACKWARD TRACTION IN TREATMENT OF CARIES OF THE SPINE.

BY CHARLES F. STILLMAN, M.D., NEW YORK.

MR. EDITOR.—I thought you might be interested in some medical matters which sometimes occur in New Jersey. Therefore I send you a partial report of the transactions of the Hudson County District Medical Society, held in Jersey City March 4, 1884. After the regular business was completed, Dr. Charles F. Stillman, of New York, who had been previously invited, delivered a scientific and interesting lecture upon "Backward Traction in the Treatment of Caries of the Spine," illustrated by clinical material.

Dr. Stillman prefaced his lecture by describing the various methods of treatment in general use and classifying them according to the principles upon which they are founded. These are, 1st, simple Fixation; 2nd, Symmetrical Traction, which included the principles of suspension and application of the plaster jacket, and 3rd, Backward Traction, upon which he dwelt more at length.

The origin of this principle, which consists in curving the spine slightly backward, so that the bodies of the vertebrae are relieved of superincumbent weight, which is transferred to the posterior process, was ascribed to Dr. H. G. Davis, although the first effective instrument was devised by Dr. Taylor. A later instrument was invented by Mr. Chance, of London, and has lately been much advocated by Noble Smith, but the application of the principle in all of these braces was defective. In each the bending point of the spine, if the patient leaned forward, was still at the seat of disease, so that great strength on the part of the apparatus was required to successfully oppose the bending.

Dr. Stillman advocated a new form of *lever* brace, which completely overcomes this tendency, and gives *fixation, backward traction,* and *forward pressure* at the seat of disease, these being the three indications necessary to successful mechanical treatment. The principle on which they were founded was illustrated by placing patients with well marked kyphrotic knuckles, face upward, upon a padded table so placed that the head and upper extremities were allowed to hang over the edge upon which rested the kyphos. In this manner the weight of the head and upper extremities produced backward traction upon the spine, causing an extension at the seat of disease, the result being seen in a diminution of the knuckle angle. By this method the superincumbent weight which caused the knuckle to form was thus used as a traction agent for its reduction.

If the disease was in the dorsal region, the short arm of the lever extended from the site of the disease to the sacrum, and the long arm from the neck to the sacrum, the two being connected at the sacrum by an adjustable clamp which fastened them together in the form of a V. The force was thus so graduated that if leaning forward was attempted the shorter arms of the lever pressed firmly upon the parts adjacent to the knuckle and exerted forward pressure, which prevented the spine from yielding at the seat of disease. Dr. Stillmau claimed that in no other brace known was this accomplished, and for the dorsal region it secures a much greater degree of fixation than any of the braces or splints in use. If the lumbar region be involved, the short arm of the lever passes from the diseased part to the second dorsal vertebræ, and the long arm from the sacrum to the second dorsal vertebræ. They are secured together opposite this point by an adjustable clamp and connected to the trunk by a T plate in front which allows the brace to be tightly strapped to the dorsal portion of the spine without exerting injurious pressure upon the arms or chest.

The effects of these braces could not be changed by alteration of position in the patient, as the peculiar action of the lever is automatic and compensatory.

Cases were shown and braces applied to patients, the demonstration being complete and satisfactory.

After Dr. Stillman's interesting and very able discourse the subject was open for discussion by the members of the society. Dr. Paul remarked that he had been greatly profited by Dr. Stillman's interesting and practical discourse; especially in the exhibition and application of the various kinds of mechanical appliances for the cure of caries of the spinal column, and hoped he would have the pleasure of hearing the gentleman again at some future time.

Dr. Quimby remarked that there were many interesting, and some novel ideas advanced by Prof. Stillman in his treatment of spinal caries. The great number of different mechanical appliances exhibited only goes to show how difficult is the treatment of this serious disease, with its accompanying deformities. Dr. Quimby observed that he thought the general practitioner, and even the specialist, in the treatment of this disease, did not always exercise a sufficient amount of caution in the use of mechanical appliances, and did not sufficiently guard against the use of too much pressure. He had seen several cases in which great damage had been done by the use of too much long-continued pressure. We should ever remember that we are operating on a formative being, whose tissues are soft and yielding.

After Dr. Quimby's remarks, a vote of thanks was passed to Dr. Stillman for his very interesting and instructive lecture.

J. A. Exton, M.D.,
Sec. H. D. Med. Soc.

Arlington, N. J., March 10, 1884.

MEDICAL PROGRESS.

SURGERY.

The Operation of Estlander (Thoracoplasty).—Dr. Bouilly (*Bulletins et Mémoires de la Société de Chirurgie de Paris*), having presented before the Société de Chirurgie a patient who, having suffered from chronic empyema, with a pleuro-cutaneous fistula of five years standing, was relieved by the resection of a portion of the sixth and seventh ribs. M. Paul Berger gave a very full and detailed report upon this operation of Estlander's, this thoracoplasty. The report embraces the details of five cases which illustrate fully the mode of treatment, after which Berger proceeds to discuss the operation itself, and the previous modes of handling chest wounds, which led to the establishment of this mode. Resection of the walls of the chest for the more thorough evacuation of pus and for the application of remedies to the cavity has been long practised; but the object which Estlander has in view in his operation is to assist in the work of spontaneous obliteration which results from the traction that the pleuritic adhesions exercise on the thoracic walls, and in the effacing of the corresponding side of the chest, and the narrowing of the intercostal spaces. This produces a gradual obliteration of the suppurating cavity and occlusion of the fistulæ, which are consecutive to the incision in empyema. This process is limited by the form and resistance of the costal arches, so that the application of the lung against the parietal surface of the pleura is subordinated to the force and extent of the adhesions which have fixed that organ in the abnormal situation where the pleural discharge has taken place. So that in cases of empyema, where the discharge is abundant, where the opening and evacuation of pus has been made late in the disease, and at a time when the mobility and flexibility of the sides are at their minimum, the incision made to evacuate the pus would frequently result in a permanent pleural fistula; this in turn leads to amyloid degeneration or to tuberculosis. To relieve this, Estlander, by submitting the costal walls to a loss of substance, produces a certain degree of sinking in, which allows of the contact of the parietal and visceral layers of the pleuræ.

The position selected for the operation depends principally upon the location of the cavity and that of the fistulous opening. The most favorable position being upon the lateral portion of the thorax on the axillary line, the intercostal spaces being there covered by the serrations of the serratus magnus. The opening, whether spontaneous or made by the surgeon's knife, nearly always corresponds to an intercostal space between the fourth and ninth ribs. The first operation for resection should be so thorough and complete as not to require a second, the osseous reparation being so rapid that a second resection presents all the difficulties of the first. If the fistulous opening is very oblique and the cavity is above it, it is simply necessary to resect a sufficient number of the ribs to correspond with the vertical dimensions of the intra-thoracic depot; if it be below, the lower ribs should be similarly resected. By reason of their connections and mechanical functions, the first two and the last two ribs are to be avoided, although Schneider performed with success a resection of the second rib and a part of the clavicle. The amount of bony structure removed depends upon the dimensions of the cavity. Sometimes, however, small cavities require a large amount of destruction of the osseous tissue. The surgeon need not hesitate to resect four, five, and six ribs, removing as much as 11 or even 13 centimeters of their substance. Of course, auscultation and percussion, and the use of the sound will limit the operation to that portion of the pleuræ provided with adhesions. The incision of the soft parts should be large, and the costal resections should be subperiosteal. The details of operating, instruments, etc., are given with much precision. The question of removal of a portion of the pleura is answered negatively, unless it be so much thickened as to interfere with the mobility of the parts. The pleural cavity is better not disturbed other than by careful washings and injections of zinc. sulph., 5 to 8 per cent., before the operation, closed by a sponge during the operation, and, if necessary, after the operation drained by a drainage tube, until retraction of the passage takes place or pus ceases to be discharged.

After the operation the thoracic wound, united by sutures, is covered by antiseptic dressings, disinfectant injections are regularly used, suppuration diminishes, the quantity of fluid used in injections becomes less, and the walls shrink together. If, at the end of six or seven weeks, on testing with a needle the spaces between the osseous fragments, a resistance is met with indicative of a rapid reformation of bone, and there is still an appreciable cavity present, the operation is imperfect and a new one will have to be performed. Considerable time must be allowed to pass before the operation can be considered as successful, and compression exercised over the chest by means of an elastic bandage facilitates greatly the healing process.

MATERIA MEDICA AND THERAPEUTICS.

A NEW PREPARATION OF MERCURY.—Dr. Sigmund Lustgarten describes (*Wiener Medizinische Wochenschrift*) a new preparation of mercury as made by him in Ludwig's laboratory, and as demonstrated in its therapeutic effects in Kaposi's clinic, which he calls hydrargyrum tannicum oxydulatum, and which is in the form of a dark-green, tasteless and odorless powder containing about 50 per cent. of mercury, that is not soluble while undecomposed; that is not readily attacked by diluted muriatic acid, but which is changed in a measure by very dilute alkalies, ammonia and alkaline carbonates, so as to form in a short time a sediment composed of extremely minute particles of mercury, the greater part of which are so small as to present under the microscope the so-called molecular movements. The question whether the alkaline secretion of the intestines is capable of performing this reduction process sufficiently to allow the superficies of the mucous membrane of the intestines to absorb this substance, as does the skin after inunction, has not before been answered with precision, until these experiments proved that the preparation passes so quickly into the circulation as to be detected within 24 hours in the urine.

The drug was given in two or three doses per day, to the amount of 0.1 gramme, and in spite of this proportionately large dose, there were no disagreeable symptoms exhibited on the part of the stomach and intestinal canal. There was neither the indigestion nor the constipation so frequently following the use of tannic acid, nor were there any of the disturbances which are generally shown after taking such preparations of mercury as are included in the calomel and sublimate groups. The same may be said with regard to salivation, as so much as six grammes have been given without stomatitis or salivation following. Up to the time of the writing of the paper 10 cases had been treated with this drug, representing pretty nearly all the grades of syphilis; the greater part were relapses, and presenting the severer and more stubborn forms, as in the papular and pustular syphilides, in which such a prompt and ready retrogression of the marked symptoms took place, as to warrant the assertion that the hydrargyrum tannicum oxydulatum is the most efficacious of the mercurial preparations known at present, inclusive of the mercurial ointment which it displaces.

GUACHAMACA A SUBSTITUTE FOR CURARE. — Dr. Gomez de la Mata, in *El Siglo Médico*, is quoted by E. Gayraud in the *Gaz. Hebd. des Sc. Med.* as describing this drug as belonging to the family of apocynies. The active principle is found particularly in the outer bark and in the different layers of the inner bark. It is used in the form of a resinous extract, which is of a somber gray color, having the outward appearance of curare, but little soluble in water; completely insoluble in alcohol, chloroform and ether. Its reaction is that of the alkaloids in general. The marked resemblance between this substance and curare, in their physical and chemical relations, is reproduced in the physiological effects which are obtained in frogs, by injecting under the skin 10 milligr. of the watery extract. The strength of the extract varies according to the time of year; during the rainy season the juice is most abundant and at its maximum of intensity. Its effects have been studied by Schiffer and Sachs.

The differences between the action of this substance and of curare are the following:

1. The poison paralyzes all the skeletal muscles, whilst the respiratory muscles act perfectly.

2. It acts perfectly upon the nervous centers, which are affected more tardily by curare.

3. Curare, which acts in very small doses when hypodermically administered, is without action when introduced into the stomach.

Sachs observed that the ingestion of the extract of guachamaca in very small doses killed chickens and dogs. Schiffer was obliged to employ doses twenty-five times the strength of those used subcutaneously in killing rabbits.

In man it has been used hypodermically in doses of 10 milligr. of the dried extract. In one of three cases the insertion of the needle was followed by a slight phlegmonous swelling, which disappeared the next day. The specific action of the drug does not appear until forty minutes after the injection, when a sleep follows, which is light in its onset, but soon becomes more profound, and continues for two or three hours. In a robust patient, 20 years of age, who suffered from spasmodic contractions of the muscles, the sleep was natural, and on his awakening there was no heaviness or dizziness of the head. The circulation and respiration remained normal. Reflex irritability was maintained throughout sleep, but the dose was too small to produce any beneficial effect.

This drug is applicable to cases of muscular contraction, and in all diseases in which curare has been recommended. The dose is 10 to 15 milligr. in hypodermic injections.

MEDICINE.

ON THE TRANSFUSION OF BLOOD IN BRIGHT'S DISEASE.—A very interesting discussion on this subject took place January 11, at the Société Médicale des Hopitaux de Paris (*Bulletins et Mémoires*). The

subject was introduced by M. G. Dieulafoy, and was considered by M.M. Dujardin Beaumetz and Albert Robin. M. Dieulafoy related two cases of hæmatophilia, one where it manifested itself through persistent and abundant epistaxis through the left nostril, and the other following the removal of a tooth. In both cases every means known to surgery was employed to check the hæmorrhage, but without avail. The conditions became alarming, and transfusion to the extent of 120 grammes of blood was practised; with the result of quickly arresting all further hæmorrhage. Here, then, a beneficial result was obtained in a dyscrasic condition, in which perhaps the structure of the smaller vessels was at fault, but in which certainly the blood did not possess its normal properties. These cases were relieved not alone in the sense that one applies oil to the empty lamp which is about to burn itself out, but the blood infused played also the part of a hæmostatic agent.

It was in studying these relations that M. Dieulafoy was led to consider the usefulness of transfusion as a therapeutic agent in such dyscrasic conditions, where the changes in the blood appear to play an important part; that is, would transfusion prove beneficial in uræmia, Bright's Disease, diabetes, acetonæmia, gout, and rheumatism? In uræmia and Bright's Disease he brought forward the details of three cases, which demonstrated that the transfusion of 100 to 120 grammes of blood was inoffensive, even when practiced in the later periods of the disease, with cardiac, renal, and pulmonary lesions; and also that the transfusion had a salutary influence upon such uræmic symptoms as the cephalalgia, vomiting, convulsions, and coma.

M. Dujardin-Beaumetz could not see in these statements any positive conclusion that the transfusion of blood could act as a curative agent in albuminuria. It is true that of late the humoral doctrine, of which Semmola is one of the strongest advocates, has been revived to account for the renal changes in this disease; but he considers that when once a renal sclerosis has been produced, transfusion could have only a temporary effect, relieving the patient for the moment, like the inhalations of oxygen, which sometimes cause the momentary disappearance of albumen from the urine. Transfusion is not only of no use except to repair losses of blood, but it is contra-indicated in all diseases where there exist organic lesions or septic blood poisoning.

M. Albert Robin discussed the part played by the blood as a hæmostatic agent in these cases of hæmophilia given by M. Deulafoy. Its action was certainly not due to renewing the blood in the vessels, for only 120 grammes were used, and possibly a less amount would have sufficed, therefore its presence must have exerted a qualitative influence.

The alteration of blood in hæmophilia is not well understood, we must admit that it consists in a peculiar modification of the plasma as shown by a diminution of the fibrine. For the precipitation of fibrinogen the intervention is necessary of a peculiar ferment belonging to the class of soluble ferments; perhaps the transfused blood remedies the insufficiency of this ferment and allows the serine to be transformed into fibrinogen, and then into fibrine, and thus restore the plasticity of the blood. According to Hazen, it is not the globules that are the active agents in transfusion, but the serum or rather the plasma, as defibrinated blood acts much less beneficially than complete blood, and the infused globules are destroyed with a variable degree of rapidity. Therefore, a minute analysis of the blood showing the amount of ferment and albuminoid substances before and after transfusion, and a comparative analysis of the blood transfused would give the chemical explanation of the effects produced.

If this test should fail, we can still apply to the question the curious facts recently made known by M. Grimaux, the influence of certain salts and their dilutions on the coagulability of albuminoid matters.

NEPHRITIS AFTER VARICELLA.—Prof. E. Henoch (*Berliner Klinische Wochenschrift*) reports four cases of varicella, in which the symptoms of nephritis supervened. The first case was that of a ten year old boy, in whom the nephritis appeared six days after the eruption of varicella manifested itself, and continued for twenty days. The second case was a two year old girl. November 13 varicella appeared with moderate fever. November 16, œdema of the eyelids and dorsum of the feet. Urine albuminous with a few tube casts and epithelium 7, 38, 1. Treatment with sweat baths, decoction of bark with pot. acet. Œdema and albuminuria diminishing. December 3, suddenly severe vomiting, collapse, cyanosis, in the evening death. Autopsy—Moderate hypertrophy and dilatation of the left ventricle, valves normal. Pulmonary œdema, fresh parenchymatous nephritis, and slight fatty degeneration of the liver. The third case was that of a five year old girl. November 10, a free eruption of varicella with fever (37, 8). November 18, œdema of the face and feet and albuminuria. Treatment by sweat baths. December 19, there were still some traces of albuminuria, the œdema had entirely disappeared. The fourth case a four year old girl. December 19, marked fever. December 20, free eruption of varicella. December 30, marked pallor of the skin and facial œdema. Headache and lumbar pains, slight fever. Urine markedly albuminous. Treatment, purgatives, Biliner water and sweat bath. January 2, face markedly œdematous, urine contains albumen, tube casts, epithelium and blood corpuscles. January 7, considerable improvement. January 13, perfect relief.

Henoch having failed to find similar cases recorded in the literature of the subject, recommends that the urine be examined in all cases of varicella, within eight days of its onset, with the expectation that many more instances of albuminuria will be developed.

NOTES ON ACHOLIA.—M. V. Hanot, in the Société de Biologie (*Comptes Rendus*), referred to a case reported by him in 1881, where, in making an autopsy in a death from sclerosis of the stomach, he found a fibrous transformation of the hilum of the liver; microscopic sections

showed the ductus communis choledochus and the cystic canal to be completely obliterated, and the same was the case with the hepatic artery and its branches into the hilum. The obliteration of the portal vein was not complete, but its lumen was markedly constricted. The absence of icterus in the case could only be explained by considering that in consequence of the complete obliteration of the hepatic artery, and the incomplete obliteration of the portal vein, the biliary secretion was almost, if not completely, abolished, and the obliteration of the duct would not cause icterus, because the liver produced no bile. This then illustrates acholia in the literal sense of the word, and explains the absence of icterus in spite of the complete obliteration of the ductus communis choledochus. The atresia of the bile vessels must have progressed so gradually that it was difficult to ascertain from the clinical history of the patient, when the acholia was first established. In another case, under observation at the time of making the report, a man, 46 years of age, who has suffered from a chronic affection of the liver for the past three years, there is a complete want of color in the fæcal matters, without the slightest icterus. He presents an hypertrophy of the liver and spleen, with considerable tympanitis, but no ascites. He is weak and emaciated, but the appetite is good, and there is no indication of any serious change in the organism. There is no leucæmia, he has never had any hepatic colics or icterus, no symptoms to indicate an interference with the discharge of bile into the intestine; nevertheless there is this permanent want of color to the fæcal matters. For this condition there seems to be but one plausible hypothesis; the hepatic lesion has diminished the biliary secretion, and has more or less completely suppressed it; just as the protoplasm of the hepatic cells under certain pathological conditions increases or diminishes the quantity of glycogenic matter with reference to its normal amount, so does it increase or diminish the quantity of bile secreted. With polycholia, we have had oligocholia, and now complete acholia. Its pathogenesis remains obscure, it presents these two clinically paradoxical peculiarities:—the obliteration of the ductus choledochus without icterus; the decoloration of the fæcal matters without icterus, the biliary passages remaining permeable. It would seem as if this acholia could exist for a considerable length of time, and that it produced the marked tympanitis present from withdrawing the antiputrescible qualities of the bile.

TAMPONNING THE LARYNX TO PREVENT PNEUMONIA AS A SEQUENCE OF DIPHTHERIA.—Langenbuch of Berlin, according to Bouchet (*Paris Medical*), believes that pneumonia, which is so common in diphtheria, is always produced by the infection of the lungs through the secretions of the larynx and of the pharynx which pass into the trachea. To prevent this after tracheotomy, he places small pieces of sponge in an etherial solution of iodoform aud allows the ether to evaporate. These little pieces of sponge are fastened to a strong silk thread. After opening the trachea, he introduces one of some size into the cavity of the larnyx with a pair of curved forceps, and fixes it there so solidly that it cannot descend further spontaneously. This done he inserts the tracheal canula, and either fastens the thread of the sponge to it or about the neck. The sponge can be allowed to remain in place as long as is considered necessary without inconvenience.

Bouchet, in his comments, thinks it would not be possible for these secretions to pass into the trachea without producing terrible attacks of suffocation. The pneumonia of croup may depend upon the action of cold air and of dust particles, which can be modified by the wearing of a muslin cravat about the neck, but this pneumonia results more especially from cardiac thromboses, which convey, by means of the pulmonary artery, microscopic granules of fibrine into the lungs, forming embolic pneumonia. It is then that we observe at first these nuclei of pulmonary apoplexy, sometimes greyish or softened in their centers, and following them, the areas of hepatization caused by a small infectious embolus.

EXPECTED VISITORS TO THE INTERNATIONAL MEDICAL CONGRESS.—The *Lancet* has received information that the following men of eminence in the profession will be in attendance upon the meetings of the International Medical Congress at Copenhagen, Aug. 10, viz.:

From France: Pasteur, Paul Bert, Rannfer, Charcot, Verneuil, Cornil, Hazen, Mallassez, Chauveau, Ollier, Trippier, Lepine.

From Italy: Bizzozero, Mossa, Golgi, Peromento, Novaro, Reymond, Giacomo, Baccelli, Tomasi, Condelli.

From Holland: Douders, Guze, Engelmann, Heinsius.

From Germany: Virchow, Ludwig, Esmarch, Volkmann, His, Braune, Kronecker, Munk, Kühne, Heidenhain, Voit, Bernstein, Grohe.

A letter from the President, Professor Panum, concludes in the following business-like way: "We do not, however, intend to mention in our programme any festivities, solemnities, and such like. We would rather emphasize our intention to make the Congress a meeting for strictly professional and scientific work.

HYDROBROMIC ACID must be used in much larger doses than has been customary if any benefit is to be derived from it. Such is the opinion of Dr. H. C. Wood (*Medical News*, Feb. 23), who has been using this drug recently in epileptic cases. He found in three cases that half-ounce doses of the officinal hydrobromic acid was much more effectual than equivalent doses of bromide of sodium or potassium, and not nearly so liable to produce symptoms of bromism. He gives the acid after meals, with syrup, and diluted with half a pint of water.—*Medical Review.*

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THE EDITOR of this JOURNAL would be glad to receive any items of general interest in regard to local events, or matters that it is desirable to call to the attention of the profession. Letters written for publication or containing items of information, should be accompanied by the writer's full name and address, although not necessarily to be published. All communications in regard to editorial work should be addressed to the Editor

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EXPERT TESTIMONY AND COMPENSATION THEREFOR.—Dr. T. J. Turpin, of Alabama, sends us the following resolutions touching this subject, and requests our views through the JOURNAL. The preamble and resolutions are as follows:

"WHEREAS, The Supreme Court of Alabama, in 1877, decided that a scientific expert must attend a subpœna, and that his testimony can be forced without allowing special compensation for his evidence as an expert, and

WHEREAS, This decision bears hardly upon the members of our profession in this State, and is an injustice for which a legal remedy should be found, therefore be it

Resolved, That the Medical Association of Greene County recommends to the Alabama State Medical Association that they use all available and proper means to procure the enactment by the General Assembly of Alabama of a law similar to the law contained in the Iowa Code of 1873, which provides that 'witnesses called to testify only to an opinion founded on special study or experience in any branch of science, or to make scientific or professional examinations, and to state the results thereof, shall receive additional compensation, to be fixed by the Court, with reference to the value of the time employed and the degree of learning or skill required.'

Resolved further, That our Secretary be instructed to transmit, at an early date, copies of the foregoing preamble and resolution to the President, Secretary and Senior Censor of the State Medical Association; and that it shall be the duty of our Delegates to the next Convention of the State Medical Association to bring the matter before the Association, and urge upon them the great importance of prompt action and persistent effort upon their part in order to procure the enactment of the law desired by us.

The above resolutions were adopted by the Greene County Medical Association by the unanimous vote of all members present at the meeting."

That a physician or medical man must obey the summons of a court so far as to present himself as a witness at the proper time and place, the same as any other witness, is universally conceded. Such obedience is due and necessary for maintaining the just authority of the court, and promoting justice between man and his fellow.

And so far as the medical witness is in possession of facts or personal knowledge relating to the case under investigation, he must testify on the same terms as any non-professional witness. But when called simply as an expert, to give opinions or facts that constitute a part of his professional acquirements, for the purpose of enlightening courts and juries on questions of medical science and practice, the medical man is as much entitled to just compensation for his time and knowledge, as is the attorney at the bar or the judge on the bench. The professional knowledge and time of the physician or attorney are his capital stock, and as much his personal property as is the horse or cow the property of the farmer. And there is no principle of equity, and no emergency of justice which will justify the taking of such professional knowledge and time without just compensation therefor. If it is said that there are many cases in which the ends of justice cannot be attained without the aid of such knowledge, and consequently that its extortion in courts is a public necessity, we grant it. But if the public good requires that I should leave my private business and make a post-mortem examination, or go to the court-room and spend time in imparting professional knowledge that has cost me months of time and more or less money to obtain, then surely the public treasury should afford me a fair compensation for that time and knowledge. The public good, as well as the interests of clients, often requires the services of a judge or attorney, but we are not aware that any court has ever extorted such services without some compensation therefor. Public necessity may require the opening of a highway through a man's farm; and the public authorities may enforce the necessity by seizing the necessary amount of land and opening the road. But they must return to the owner a just compensation for the land taken. So the court may issue its summons and compel the medical man to leave his patients and repair to the jury box, or become liable to severe punishment for contempt of court. But if it compels him to impart his professional knowledge, either for the public good or private interests, without awarding

him just compensation therefor, it simply robs the witness of his personal property as plainly as if it had caused the seizure of his horse and buggy and converted them either to public or private uses. We think the foregoing views have been sustained by the rulings and decisions of a large majority of the higher courts in this country during the last twenty years. They are also in accord with the views expressed by the best writers on medical jurisprudence both in this conntry and Europe.

MEDICAL COLLEGE CONTROVERSIES IN LOUISVILLE.—For some months past, we have been receiving circulars and newspapers containg most disparaging comments on the Faculty of the University of Louisville, apparently emanating from parties connected with the Louisville Medical College. On the other hand, our attention has been recently called to a supplementary paper in the February number of the *American Practitioner*, written by Dr. D. W. Yandell, Professor of Surgery and of Clinical Surgery in the University of Louisville, in which he shows most clearly that from the Faculty of the Louisville Medical College has come the numerous letters to students in all parts of the country directly soliciting their attendance in that institution at half the published rate of charges, under the pretense of issuing "beneficiary scholarships," etc., some of which have attracted the attention and been commented upon by the Secretaries of the West Virginia and Illinois State Boards of Health. The letters given in full by Dr. Yandell, with names and dates, are sufficient to show that the Louisville Medical College during the last year has been reviving the disgraceful practices so freely indulged, in former years, by what was known as the double-head Louisville–Kentucky School of Medicine. How men of education, and sometimes of rare talents, can allow themselves to pursue policies and indulge in practices in the name of a medical college, which they would instinctively shrink from as disgraceful in their individual professional capacity, is a mystery to us. There is only one item of comfort to be gleaned from all this unprofessional scrambling and bidding for students; which is that it is rapidly maturing a public sentiment, both in and out of the profession, which will soon lead to the enactment of such laws as will effectually separate from medical colleges the right to grant diplomas conferring the right to practice medicine.

ANCIENT AND MODERN MEDICINE.—The address of Dr. Bridge, in the present number of the JOURNAL, on the more recent progress and modern character of the Medical Sciences, forms a good counterpart to the paper of Dr. Maughs in a recent number, on "What the Ancients knew of Obstetrics and Gynæcology."

MEDICAL COLLEGE COMMENCEMENTS.—The annual Commencement exercises of the Medical Department of the Arkansas Industrial University, located at Little Rock, were held on the evening of the 3d inst., at which thirteen candidates received the degree of M.D. An honorary degree was conferred on James A. Dibrell, Sr., M.D., of Van Buren, Arkansas. The occasion was honored by the presence of the Governor and many other prominent citizens, and the proceedings were such as to indicate that the Faculty of this young institution are honestly endeavoring to maintain a fair standard of education.

THE second annual Commencement exercises of the College of Physicians and Surgeons of Chicago were held on Tuesday, the 11th inst., and were witnessed by a large audience. The degree of M.D. was conferred by the President of the College, Professor A. Reeves Jackson, upon fifty-two students who had passed examinations satisfactory to the Faculty. The doctorate address was delivered by Prof. C. W. Earle, who discussed the importance of Chicago as a center of medical education, and criticised justly the illiberal action of the Board of Commissioners of Cook County in obstructing the proper execution of the law for supplying material for the study of anatomy and surgery. The address was received by the audience with frequent demonstrations of approval. A banquet was given to the alumni and graduating class, at the Sherman House, in the evening.

DEATH OF LUNSFORD P. YANDELL, M.D., OF LOUISVILLE, KY.—We were pained by the announcement a few mornings since of the sudden death of this prominent member of the profession of Louisville. Dr. Yandell was a physician of high attainments and of good reputation as a writer and teacher. He has been cut off in the middle period of adult life.

DICTIONARY OF PRACTICAL SURGERY.—A "Dictionary of Practical Surgery" is in preparation, and is to be published by Messrs. Smith, Elder & Co., of London, within two years from the present time. The work will be produced on the lines of "Quain's Dictionary of Medicine," and will be edited by Mr. Christopher Heath.

SOCIETY PROCEEDINGS.

CHICAGO MEDICAL SOCIETY.

At the regular meeting of March 17, 1884, the following important topics were discussed: "On the Ætiology of Typhoid Fever," a paper read by Dr. J. F. Todd; and a second paper forwarded by Dr. Roswell Park, of Buffalo, N. Y., Second Vice-President of the Society, wherein he has deduced interesting conclusions concerning the following topics:

I, Suture of Nerves; II, Elongation of Nerves; III, Exploration of the Brain by the Hollow Needle.

It will be seen by a perusal of the following review of our former resident colleague's paper, that he has cheerfully responded to a request made to contribute his mite, and to furnish with needles and pen numerous thoughts on some of the select topics in the surgery of the nervous system, and we therefore present the main points embodied in the paper furnished by the Secretary, who, at the above date, read the article for the author.

We read[1] that Guillaume de Salicet, Lanfranc, Guy de Chauliac, and others, recommended the sutures of divided nerves. But when we remember that nerves and tendons were often confounded in those days, this interesting item loses part of its importance. In 1776, Cruikshank demonstrated the possibility of cicatrization of nerves. After him Fontana proved this cicatricial substance to consist, more or less, of true nerve tissue, and recommended its union by suture, when divided, and which was further advised by Dupuytren. But the first to actually practice it as a physiological experiment on human patients were Baudens, Langier and Nelaton, the two latter having each within a single week, in 1864, a case which each for his own part reported.[2] It happened very curiously that in each of these cases it was claimed that sensibility and motility had returned within 24 hours after operation. This seemed incredible, and Richet[3] cleared up the matter by reporting a case. This author claimed, and most properly, that a similar state of affairs had obtained in those cases in which Langier and Nelaton had claimed such surprising results, and that they had not accurately studied their cases before operating. Since that time the subject has been studied experimentally and clinically, until now the indications to the surgeon are perfectly clear. In the literature on this subject may be found among others the views of Arloing and Tripier, Langerfeldt, Lemke, Kraussold, Page, Brown-Sequard, Tillmanns, Nicaise and Holmes.

The exact statistics of all cases reported to date, as nearly as the writer could estimate, is 30 that are on record, nearly all of which have been gratifyingly successful. To these he would add two more never yet reported, along which may be also added some features of the operation.

[1] International Encyclopædia of Surgery, iii., 621.

[2] *Comptes Rendus*, 1864, No. 25.

[3] *Union Med.*, 1867, p. 444; *Gaz. des Hopitaux*, 1867, p. 519, *et seq.*

Case I.—Rupture of the Sciatic Nerve—Immediate Union—Restoration of Function.—H. R., æt. 13. In 1881 the surgeon excised the hip joint of this patient (who was then 11 years of age) for long standing and extensive disease. He made a good recovery from a severe operation. In time sinuses burrowed in the region of the buttocks, along with other evidences of new and extensive disease, and Feb. 9, 1883, radical operative measures to remove the disease were again undertaken, the patient being admitted to the Michael Reese Hospital, Chicago. He was assisted by Drs. Lackner, Tracy and McAuliffe, and proceeded first to explore the parts. He found caries of the tuberosity and other parts of the ischium, sinuses leading inside the pelvic cavity and around the rectum. In brief, aggravated tuberculous disease of the bony pelvis and contents was present. In order to secure access to the parts, and to permit the necessary manipulation, a flap composed of the buttocks had to be laid up on that side, owing to the cicatrization following the previous operation, and the present local disease and induration. The sheath of the sciatic nerve had contracted firm adhesions to the overlying parts. The nerve was unmistakable, but the tissue was in the way. So one of the gentlemen present undertook to hold up the flap with a powerful retractor, while the operator dissected the tissues from the nerve. Being short of sufficient assistance, the patient, inadvertently, was permitted to so far recover from his chloroform that he gave a violent wrench and turned partially around, when it was discovered that the nerve had been torn completely through, the ends, while not exactly ragged, being anything but smooth. The ends were dissected free and the operation proceeded with as had been originally contemplated, *i. e.*, by resection of a good portion of the ischium, scraping out of the sinuses leading into the pelvis, inserting drainage tubes, etc., after which the nerve ends were united, first snipping them off evenly with the scissors, and then sutured as accurately as possible by two catgut threads passed entirely through the nerve trunk and about a quarter of an inch from the line of section. After this, the soft parts were closed as usual, proper provision was made for drainage, and a Lister dressing applied, the whole having been done under the carbolic spray.

For about a week there was absolute paralysis of sensation and motion throughout the region supplied by the great sciatic. Thirteen days after operating there was but a small area of integument near the external malleolus, which was not sensitive as usual, while he could move his leg as well as before the operation, and, judging by his progress, regeneration was practically complete in a day or two more.

Case II.—Division of Radial Nerve and Certain Tendons—Suture of same after Two Weeks—Restoration of function. C. D. G., aged 16. April 1, 1883, patient cut his right wrist with a cheese knife, in such a way that severed the radial nerve and artery, and the tendons of the extensor ossis metacarpi pollices and extensor primi internoidi pollicis. The physician who saw him at the time of the accident contented himself with checking the hæmorrhage. At

Reese Hospital, Chicago, on the 16th, the following condition was noted: Hand dropped to the ulnar side, with sensibility of those parts supplied by the radial nerve extremely impaired, and indeed in the central portions of that area practically lost.

After anæsthetizing him and dissecting down upon the part, found the tendon ends retracted within their sheaths so as to be an inch apart. Opened the sheaths and carefully united the tendons by catgut suture, and their sheaths over them by interrupted sutures of the same material. Then the ends of the radial nerve were found, and freshened and brought together by a single catgut thread. Over all iodoform dressings. By May 8 sensation was restored to the area supplied by the radial nerve; by the 25th it was evident that the tendons had firmly reunited, and, except as limited by partial adhesions in their sheaths, were capable of reassuming their functions. In course of time these adhesions became stretched, and the hand became very nearly as useful as before.

Commentary.—Suture of nerves is known as *direct* when the suture material is passed directly through the nerve trunk, and as *indirect* when only the nerve sheath is included; the former is usually preferable. There is fair prospect of success even months after the original injury, as witness the case in which Wheelhouse[1] united the sciatic fully nine months after the accident which severed it, the patient in four months more being able to do all manner of hard work; while Jessop, according to Tillmanns[2], has recently operated *nine years* after the injury, and with fair success. Nevertheless, the sooner it is done the better, and the quicker will be the result.

If, on dissection, the nerve ends prove to be clean cut (in recent cases), they need no further attention before uniting them, and the ordinary full curved surgical needle will suffice for the operation, taking care to insert and pass it flatwise between the bundle of nerve fibers until the broader cutting part is through, and then to turn the needle half round and let the carbolized catgut slip through the little slit. It may be necessary to introduce two or three sutures, especially in the larger trunks. To avoid tension of the limb, the part must be dressed accordingly and immobilized. Observe full antiseptic measures. Evidently, primary union is only such in appearance. It is cicatricial, not physiological. Immediate suture does not prevent degeneration, but simply permits regeneration to take place much more rapidly than it otherwise would. But immediate union of divided nerve tissue does not occur. Letiévant has suggested autoplastic operations on nerves, and Gluck in 1882, at the Congress of German surgeons, reported some astonishing successes in neuroplasty by transplantation. While the writer has not as yet performed this operation, he would not hesitate to make the experiment of transplanting nerve from some animal into a patient did a suitable case present.

It may be well to add, no case yet known has had neuritis or tetanus, or have any untoward consequences resulted from this sort of surgery of the nerves. The operation deserves much more cordial recognition and acceptance than it has yet received.

II.—Elongation of Nerves.

Upon this portion of the paper the writer dwelt considerably upon the literature, and many were the authorities quoted. Its application has apparently, therefore, not been restricted to neuralgia and contractures, but has been extended to anæsthesia and paralysis, great atrophy, convulsive affections, tetanus, to locomotor ataxia, and even to anæsthetic leprosy, etc.

To Nussbaum, says the writer, we owe a debt of gratitude for making the way clear, and first putting "nerve stretching" into practice. While resecting an elbow in 1860, his assistant accidentally but forcibly stretched the ulnar nerve, and it was noticed the tetanic cramp with which the arm was previously affected totally disappeared, which made a strong impression on his mind. In 1869 it happened that Billroth had a patient who had received a violent contusion of the buttock, and subsequently developed epileptiform paroxysms. Under the impression that there was nerve irritation from some bone splinter, he denuded the nerve, without finding anything wrong; but the nerve had been disturbed, and more or less stretched, and recovery followed. Acting on these hints, Nussbaum for the first time practiced intentional elongation in 1872, the case being one of contracture of the upper extremity consecutive to contusion. Recovery followed the operation. Without discussing the general merits of the operation, or the statistics, or extent of stretching that nerves will bear, nor yet the changes resulting therefrom other than clinical results obtained, we will be content in making synopses of the five cases reported by the writer, that have not heretofore been placed on record, in three of which elongation was made on purely empirical grounds, and merely as physiological experiments.

CASE I.—Chronic Sciatica—Elongation—Recovery.—W. L., æt. 25. Has suffered severely from sciatica for some five months; has lost considerable flesh; has been all this time under medical care, and for the last six weeks in the County Hospital, Chicago. A most varied internal treatment has been resorted to, as well as the use of electricity, part of the time intelligently applied. Patient was admitted into the Michael Reese Hospital, Chicago, and on June 15, 1883, he was anæsthetized, and the sciatic nerve of the affected side was stretched. The operation was made under the spray. By the 20th, when the dressings were changed, the wound was found to have healed per primam, pain was relieved at once, and at this date sensation and motion were found to be nearly normal. There was now and then a twinge during the next month. July 20, when he was discharged, he simply noticed an occasional pain in one small spot in the calf of the leg. September 1, he called to say he was perfectly well.

CASE II.—Toy-Pistol Tetanus—Elongation of Brachial Plexus—Amelioration of Symptoms.—A. G., æt 10. On the 4th of July, 1883, patient injured

[1] *Brit. Med. Jour.*, Aug. 5, 1876.
[2] Loc. Cit., case 11.

his left hand with a toy-pistol. On the 11th, at 4 A. M., he developed the first symptoms of tetanus. He was at once brought to the Michael Reese Hospital. Saw him at 11:30 A. M. At that time there was moderate clonic spasm of the muscles of back of neck, with tonic exacerbations; found a suppurating wound in palm of left hand. The patient was anæsthetized, operated under the spray. The palmar wound opened, found it foul, and containing a piece of wadding, which was removed and the cavity scraped. An incision along the inner border of the biceps brachii was made, the nerves isolated and stretched in each direction, including the median, ulnar, and internal cutaneous nerves, and that of Wrisberg. Wound was closed over a small drainage tube, and iodoform dressings applied. The patient improved decidedly after this procedure. ℞. Squibbs' ext. physostig., gr. $\frac{1}{5}$ hypodermically every two hours, also sodii bromid., gr. x every two pours, and chloroform inhalations during any tetanic seizures. Evening, condition very satisfactory. Next morning about 7 o'clock he complaiued of pain about the heart, and died within an hour, apparently from spasm of the diaphragm. Autopsy not allowed.

Case III.—Motor Paralysis of Right Leg, following Spinal Meningitis—Elongation of Sciatic Nerve—Negative Result.—A. K., æt. 40. In July, 1881, was seriously sick, which was probably spinal meningitis. At present he suffers from monoplegia, the right lower extremity being the part involved; has been under the care of several physicians, and recently a patient in the medical department of the Michael Reese Hospital, where, along with electricity, various other remedies were tried. Elongation of the sciatic as an experiment was proposed, patient accepted it as such. Sept. 15, 1882, operation under the spray. The limb was suspended by the nerve and stretched from above downward and *vice versa*. Heart's action momentarily disturbed. Union per primam.

October 17, patient acknowledges perceptible improvement. Very little improvement was made in several weeks longer that he reuained in the hospital.

Cases IV and V.—Paræsthesia and Dysæsthesia of Unknown Origin—Elongation of Sciatic, and later of Crural Nerves—No Result.—H. K., æt. 32, has suffered fourteen years from perverted sensations, causalgia, etc., referred to integument of lower extremities, especially the right one. Of late, complains of a feeling of intense cold, referred particularly to the area of distribution of the right sciatic and peroneal nerves. His intelligence is not of high order. Patient has been under the observation of Dr. Ernst Schmidt for years, who finally suggested elongation as a pure experiment, and admitted him to the Michael Reese Hospital, June 22, 1883. Sciatic and peroneal nerves were stretched with the usual precautions. July 1, no improvement, and at patient's urgent request, the anterior crural nerve was stretched, and yet no benefit seemed to accrue. Each time the nerve was stretched downward in this case, and also an irregularity of the heart's action occurred for a few seconds.

Commentary.—Case I exhibits the happy effects to be obtained in obstinate cases of sciatica, resisting medication. That the operation has a wide sphere of usefulness in this form of complaint, of which not a few cases are already on record.

Case II exhibits at least the temporary relief to be obtained by this measure in cases of tetanus. That we cannot afford to reject this method of treatment, for amelioration of symptoms is better than no impression at all, although in this case, an error may have been committed in omitting also to stretch the musculo-spiral nerve, and possibly, that too much sedative treatment was given the patient, and not sufficient stimulating nourishment; a not infrequent mistake.

Cases III., IV., and V. were undertaken, as already remarked, on purely experimental grounds, and the patients accepted it as such. It further serves to prove that we usually learn more by our failures than from our successes.

III.—Exploration of the Brain by the Hollow Needle.

Perhaps there is no special literature on this subject. To illustrate the ease with which it may be done and its harmlessness, the author cited the following cases:

Case I.—Gunshot Wound of Brain—Trephining—Repeated Exploration for Pus—Extrusion of Fragment of Bone—Recovery.—J. L., æt. 20. On the afternoon of July 4, 1883, received a bullet wound of the left parietal eminence; brought to the Michael Reese Hospital. The house surgeon abstained from exploring the wound, but clipped the hair short and made antiseptic occlusion with iodoform cotton; also applied ice-bags. At evening there was complete right hemiplegia, pulse 90, pupils normal, patient conscious and rational; continued the ice-cap, and gave directions to use catheter.

Next morning learned of patient having two convulsions during the night; he also lost consciousness; pupils normal and respiration natural.

Exploration under the spray revealed a comminuted gunshot fracture; trephined; removed several small fragments, some of which were partially imbedded in the brain; removed also a piece of the small pistol bullet; compression was then made, and dressings of napthaline gauze applied. For several days patient's condition was satisfactory, except that the hemiplegia persisted.

July 13.—Answered questions rationally.

July 18.—There was free discharge of pus.

July 20.—Symptoms of central irritation; fear of abscess forming; dressings removed; introduced a well cleansed needle of a hypodermic syringe through the cicatricial tissue. Explored in different directions by its full length, never completely withdrawing the needle point; no pus and but a few drops of blood entered the barrel of the syringe. No anæsthetic was given, nor pain complained of; no unpleasant effect of any kind followed.

July 23.—Has some control of right leg, but the arm was in a contracted condition.

July 26.—Patient very fretful and irritable, discovered a hard substance under the integument tie. Upon cutting down (without anæsthesia), removed a piece of bone of the size of a silver half-dime and the full thickness of the skull. To be certain that no abscess was forming, exploration was again made with the hypodermic needle as before, and again with negative results.

July 28.—Patient discharged, wearing a lead plate to repress a tendency to hernia cerebri.

Aug. 3.—Patient steadily improving, and regaining the use of his arm.

CASE II.—Suspected Abscess of the Brain—Exploration.—This case presents a humorous side. H. H., æt. 38, admitted to the Buffalo General Hospital during the first week in January of the present year; no accurate history elicited. Patient had facial paralysis of right side of the face; gave a very indefinite history of suppurative trouble of right middle ear, dating back for years. Had also further paretic symptoms in the limbs, incoördination of ordinary movements; incontinence of urine and fæces; pupils unequal, but sensitive to light; pulse and temperature normal. He gave no history of convulsive seizures of any kind; syphilis denied.

Jan. 7.—Was summoned to a consultation concerning the case; others present, Drs. Wyckoff, Rochester, and Gay. For several hours patient had been comatose; pulse had been as low as 48; and his general appearance was as of one suffering from compression of the brain. Bearing in mind the trouble in his middle ear, and the other part of the history of the case, an abscess of the right side of the brain, or a collection of pus in that neighborhood, was suspected, and exploration was resorted to over the mastoid region, first trephining high enough to escape the lateral sinus. The longest needle of a hypodermic was then used, passing it inward, upward, downward, backward and forward, getting thereby only a few drops of blood. Wound was irrigated with sublimate solution, closed over a drainage tube, and a napthaline dressing applied. Spray not used; very little ether required. The succeeding day, Jan. 8, patient perfectly conscious. In short, this had been an epileptic seizure.

Jan. 16.—Wound perfectly healed over where the button of bone had been removed, and his general condition was improved.

Feb. 5.—Patient went home perceptibly better than when he entered.

Evidently here was an error in diagnosis, but an excusable one, as the man had not been in the hospital long enough to make a diagnosis possible, and where no history was obtainable, especially regarding his previous seizures. It is, moreover, obvious that the epilepsy in his case was secondary to some serious organic change, and a case of this kind, with its post mortem revelations, was still fresh in the surgeon's mind, which possibly also influenced him unduly to operate. In spite of error, however, the patient was benefited rather than injured by the operation. Exploration of the brain, at least of the upper and enveloping portions, by the hollow needle is harmless, and it should find a recognized place both in our surgical practice and in our text-books.

DISCUSSION.

Dr. J. G. Kiernan said that Johnson (a Norwegian physician) had experimented on suture of nerves in fowls, and reported that to do so by the direct method it required 45 days before the animal regained the normal function of the affected part, and 60 days when it was performed by the indirect method. Regarding the second part of the paper, nerve-stretching, there is not much benefit to be derived from the operation, except in cases of neuralgia. The operation is not unattended by danger. During 1882, of 25 cases of locomotor ataxy reported where nerve-stretching was performed, five cases died from the operation. The same year, Graeme Hammond reported a case where the operation aggravated the disease. In a case of multiple cerebral sclerosis in which he was personally cognizant of the facts in the case, he reported the following result: The patient (a man) having previously been treated for a long time, visited an Eastern city, and returned markedly improved. Upon inquiry, I was told by him that the posterior cord of the brachial plexus had been stretched. I examined the surface over the region of the clavicle, and at once saw that only the integument had been cut through. Now here is a case of imaginative improvement, and the man really believed himself improved because, as he supposed and believed, the real operation had been done to relieve him. Regarding the case of tetanus reported in the paper, he did not think nerve-stretching was warranted after the source of irritation had been removed, the wound cleansed and dressed antiseptically, and the patient treated with physostigma. Regarding exploration of the brain, the speaker thought it an unjustifiable procedure, unless based on symptoms localizing the lesion in some portion of the brain.

Dr. J. J. M. Angear arose and debated the subject quite extensively. Regarding the vicarious action of nerves that the author alludes to, and their anastomoses, he did not fully understand. For it is a fundamental principle that nerves are continuous, and thought these words should not apply here, as we do to the circulatory system.

Regarding the cases of suture of nerves after long standing injuries, the speaker said:

When a nerve is severed and does not at once heal, that nerve or portion of it passes into fatty degeneration, and it is then no longer a nerve, and we might as well talk of restoring arteries after ligating them as of restoring nerve function after this manner.

To illustrate. We may have a painful stump after an amputation, and why? Because the ends of nerves supplying the parts have not passed through this degenerative process, but instead, little fibrous cords or bulbs, or a tumor has formed, and oftentimes may require to be removed to relieve the increased

sensibility. We do not have that immediate physiological action from suturing nerves. It takes weeks, or many months before physiological action is established.

With reference to elongation of nerves, great damage may be done by this procedure when this operation is performed. A surgeon often does look into the details, or the minutiæ, to see further what is wrong, about the nerve to be stretched, but proceeds to the stretching of it; and I very much doubt if peaceful, harmonious nerve action follows this operation, or at least, in but one or two exceptional cases.

Exploration of the Brain.—This we cannot endorse as a society. If we operate on the cerebrum of a patient fatal harm may result. I cannot see how it is the "harmless operation" the surgeon states it to be, and I think that death more frequently occurs than beneficial results following such procedures. Certainly there is great danger in probing the human brain, for a minute clot may form from the hæmorrhage that may ensue, and this carried along a vessel may close it. He cited a case of this kind where the man died. When the cerebrum of pigeons, *i. e.*, portions of it, are removed, they are greatly incapacitated after this has been done.

Regarding trephining for confirmed epilepsy, I do not think we are justified in doing this. A case of this kind is under my care now, that of a woman where trephining was performed, and the case is on record to-day that a cure was effected thereby, whereas the truth is, before the printer's ink was dry the woman grew worse, and has remained more so than was her condition previous to the operation.

Dr. G. C. Paoli. Let us admit for the sake of argument that suture of nerves and nerve-stretching will relieve suffering humanity. But no statistics that he knows of are yet published of what the percentage of successes are. He does not doubt but what in a very few cases nerve-stretching may prove beneficial. We often admire the boldness of a surgeon, but what a surgeon does today he would years ago have been branded for as committing murder. Some of our colleagues that are old in the practice of the profession are for like reasons, perhaps called "old fogies," because we do not go ahead and cut, but nature heals our cases, and ere long it may be that the operation of nerve-stretching will be performed in acute neuralgia, as it is now done to relieve chronic forms of it. The operation for sciatica has been in vogue during the past ten or fifteen years only.

Dr. D. A. K. Steele thought the discussion thus far had been quite severe in criticizing the paper, aud thought immediate nerve suture to be justifiable. It should be done oftentimes where only the integument is sutured. Nerve stretching, he thought, useless in tetanus and locomotor ataxy, whereas in obstinate sciatica it cures, and is a justifiable operation.

The last portion of the paper, on Exploration of the Brain, is as yet certainly a mooted question. It seems to me that it cannot be done without a blood clot forming, or wounding a blood-vessel, or that paralysis may ensue. If such is the case, then it is not a justifiable operation. Some portions of the paper merit much praise, and as such I have been much interested.

Dr. R. Tilley thought the surgeon was not justified in doing more at the first consultation in the case of toy-pistol tetanus cited in the paper, than the removal of the piece of wadding and the mere cleansing the wound and dressing it properly, and using antiseptic measures, etc., etc.

Regarding suture of nerves and union of nerve tissue, experiments have been tried where crossing the nerves has been done—by crossing the distal end over the central portion, (X, thus) and then it took from two to ten weeks before they become adherent and function restored. Complete paralysis has occasionally resulted.

Motion that the Society do now adjourn prevailed.

L. H. M.

Among those from this city and Springfield, Ill., who attended the "Sanitary Council of the Mississippi Valley," at its sixth annual meeting, held at Memphis, Tenn., on Friday, the 21st, were: Drs. John H. Rauch, Ralph E. Starkweather and Liston H. Montgomery.

OBSTETRICAL SOCIETY OF PHILADELPHIA—STATED MEETING, MARCH 6, 1884.

The President, R. A. Cleemann, M D., in the chair.

Dr. Wm. Goodell made the following correction of a misstatement.

"At the last meeting of this Society I made a misstatement with regard to that distinguished ovariotomist, Mr. Tait, which I greatly regret, and which I wish here to correct. I was misled by some remarks made by Dr. Sutton at the last meeting of the American Gyncæological Society. These were so reported as to convey to my mind the impression that Billroth was the only European operator who did not refuse any case of ovarian tumor, however unpromising it was, and that Mr. Tait—to borrow Dr. Sutton's language—'does not remove many large tumors, those which weigh from sixty to sixty-five pounds, with extensive adhesions, etc.' In quoting this, by a careless slip of the pen I changed the word 'many' into 'very,' and in addition I wholly misapprehended the purport of the above sentence. Dr. Sutton has since, in the *Medical News* of February 23, explained that he did not mean that Mr. Tait selects his cases, for he was 'not aware that this British ovaiotomist refuses to remove a tumor because it is large,' but that Mr. Tait has the largest line of ovary and tube-cases and the shortest line of big ovarian cysts of any man I (Dr. Sutton) visited in Europe.' In making this correction here, I wish to repair the injustice which I unwittingly did Mr. Tait before this Society."

Dr. Goodell then exhibited an extra-ovarian cyst with the following history: The lady, aged 28, and the mother of four children, had a miscarriage early in last October. At that time her family physician discovered the tumor. It slowly grew, but gave the

lady so much inconvenience from pain and pressure that she was brought to his office late in the following December. It was not large but was very sensitive, and was diagnosticated to be an ovarian tumor.

Both ovaries were removed early last February and the lady recovered promptly. The peculiarities of the cyst were to him unique. The ovary lay to one side of a thick-walled cyst, and at such a distance from it that the cyst could have been removed without injury to the ovary. The latter was, however, extirpated along with the cyst because it was diseased. Hitherto all parovarian cysts which he had encountered were thin-walled and contained a clear fluid. But this one had thick walls and contained a turbid, brown fluid. It started from the left broad ligament and was adherent to the bladder, omentum and abdominal wall. Another point of interest was the fact that the right ovary had doubled its size from follicular degeneration, and yet pregnancy had taken place.

Dr. Robt. P. Harris suggested the possible existence of a third ovary as the starting point of the tumor. He also thought that the presence of a third ovary might explain the persistence of the menstrual flow in some cases, after the operation of double ovariotomy.

Dr. Goodell also exhibited a coceyx removed for coccygodynia. The patient had met with a fall down stairs some years previously and the injury was followed by a vaginal abscess of some kind. She had all the classical symptoms of a very bad coceygodynia, and had fallen into a nervous condition which bordered on insanity. Dr. G. had intended merely to sever the nervous attachments of the coceyx by the sweep of a tenotomy knife, but after the patient had been put under ether, the tip of the bone was found unnaturally movable and giving distinct crepitation. The loose bone was therefore removed, and as the articulating surfaces were found rough and denuded, the whole coccyx was removed by bone forceps. Great relief followed this operation.

Although he had seen very many cases of coccygodynia, this was the first case on which he had operated. In a very few traumatic cases he had wished to operate, but was not permitted to do so. The vast majority of these cases are, in his experience, those of nervous or neuralgic coccyx, and they get well in his hands under rest, massage, electricity and appropriate constitutional treatment. The great difficulty, in cases of severity, is to decide between the nervous mimicry of the disease and pure coccygodynia in which positive lesions have been sustained, and their effects have not yet passed away, as for instance, in a sprained or a fractured coccyx, or in a rheumatic, a gouty, or an inflamed coccyx. There is yet another difficulty in the way of diagnosis, for sometimes an injury received in an hysterical woman is followed by local nervous phenomena, which will last long after the original lesion has been cured. For instance, on one occasion he had been so greatly deceived in the diagnosis of traumatic and nervous coccygodynia as to make him very cautious in resorting to the use of the knife. A highly intellectual lady, who spent her leisure in reading metaphysical works, received an injury to her coccyx by the sudden "backing" of the horse on which she was mounted. She was at that time suffering from nervous prostration,and the blow started up very exacting coccygeal symptoms. Dr. Goodell found retroversion and a prolapse of both ovaries. These dislocations were remedied and the patient put on a vigorous constitutional treatment; but she grew no better and an operation was proposed and agreed to. As soon as the day and the hour were decided upon, she lost all pain in her coccyx, and has not since had a return of it. This happened about six years ago. On another occasion he saw a very obstinate and severe case of coccygodynia, which he had been treating unsuccessfully for a long time, and which had a traumatic history, quickly disappear under an exciting family jar. In view of this experience he believed it always safer at first to consider coccygodynia as a local expression of a general neurosis,and to treat it accordingly.

Dr. J. H. Packard asked why Dr. Goodell had preferred the bone nippers to disarticulation in the first case.

Dr. A. H. Smith asked if Dr. Goodell had removed the entire coccyx. (Dr. Goodell was not sure, but thought so. There had been an abscess in connection with the injury and the bone was dead and somewhat necrosed, he had cut off one piece with the nippers and then disarticulated the remainder.) Dr. Smith continuing, said, there had been suppurative action probably followng anchylosis. Such a condition might result from injuries received from labor or from falling astride a chair back or a rail. Most cases were reflex hysterical or uterine pains, as will be proved by the freedom from tenderness when the finger is pressed on the coccyx when making a vaginal examination. He has never removed one,because he has seen such poor relief from the operation in any cases that have come under his observation. Why should relief come unless all the nerves and other painful tissues be also removed? He will be glad to hear the result of the operation in the case reported by Dr. Goodell this evening.

Dr. Packard demonstrated to the society a new method of applying axis traction to any ordinary obstetric forceps. The device consisted of two steel hooks arranged to catch in the fenestræ of the blades of the forceps, and terminating in rings through which a wooden handle is to be passed. The handles of the forceps are to be lashed together.

Dr. Smith remarked that Dr. Tarnier's first suggestion was to pass a cord through the holes drilled through a widened portion of the blades at the point at which handles are now attached. The hooks exhibited by Dr. Packard did not draw from the right point, and he thought there would be difficulty in adapting them when the head was high up.

Dr. Goodell thinks that Tarnier was anticipated in the cord attachment by another French physician.

Dr. B. F. Baer read a paper on The Significance of Metrorrhagia About and After the Menopause. (See *Amer. Jour. Obstet.*) Metrorrhagia recurring about the menopause is as likely to be the result of disease of the uterus or its appendages, as it is at any period previous to that time. The popular belief that flood-

ings at the change of life are physiological, often results in harm. That the blood-loss is depuratory or critical, and that it protects the vital organs from injurious congestion, is erroneous Where health exists the cessation of menstruation will be attended by no more aberrations of function than are seen in its establishment. An analysis of 2,200 cases treated in hospital and private practice, show that nearly the same number of women sought advice during the establishment and the decline of menstruation, and it further shows that the numbers rapidly increase as the period of greatest fecundity is reached, and decline after it is past.

Epithelioma of the cervix may result from injury of that organ, but also requires some peculiarity in the structure of the tissues which renders them susceptible to an induced dyscrasia. When a woman in the midst of the fertile period suddenly ceases to bear children, there is often some local cause for it. There is some causative relation between acquired sterility and cancer. It is safer to believe the disease of local origin, for we will then endeavor to discover and remove all sources of irritation, and possibly prevent its development. Detailed histories of a number of cases are given, to illustrate the truth of the positions assumed. Where the menopause is retarded beyond the usual period, the cause can often be found in some diseased condition connected with the sexual system, and as a rule it is an old standing trouble. When metrorrhagia recurs after the menopause has been fully established, it is almost invariably the result of a pathological change in the tissues of the uterus.

Dr. Goodell agrees almost wholly with what Dr. Baer has said. He thinks the dangers of the menopause much overrated. Cancer and fibroids of the uterus occur more frequently at that age than any other, and have caused the popular dread. Although hæmorrhage is always pathological, its cause cannot always be discovered, and in this dodging period serious hæmorrhage may occur and no dangerous condition exist. He would like to believe that cancerous growths had a benign incipiency, but cannot go so far. The microscopists make many mistakes in ascribing malignancy to growths removed from the uterus. Dr. Goodell then gave a number of cases in which experienced microscopists had given prognosis of early fatal termination, based upon the cell formation of growths removed from the uterus, but these cases had recovered, and now showed no evidence of any diseased condition. With regard to the small proportion of cancerous growths following laceration of the cervix uteri, the doctor called attention to the large number of Irishmen using clay pipes, and the small number of lip cancers, and yet it is universally acknowledged that the use of a clay pipe is the principal cause of such growths.

Blood-letting is practiced very freely in Turkey and the East, and women, as a consequence, get very stout. Such are more liable to profuse hæmorrhage at the dodging period.

Dr. Wm. T. Taylor reported a case of malarial poisoning in a newborn babe. We have frequently observed fevers of a malarial type in very young children, in some even during the first year, which were ushered in by a convulsion or other prodrome, without a rigor, as occurs in older persons, and their character is only recognized by a repetition of the attack in a day or two. But the youngest subject of this disease which I have met with is the following case:

Mrs. A. R., during her second pregnancy was affected with malarial fever, and although she was then residing at the seashore, was obliged to take occasional doses of quinine to control it. She returned to her city residence at the end of the season, but continued using quinine from time to time until the end of her uterogestation, which was completed in November last, when her babe was born. Her labor was natural and easy, and she had no unfavorable symptoms. The child appeared healthy, was of good color, but was smaller and feebler than her first born at its birth. As she had a good supply of milk it soon drew the breast quite vigorously.

About one week after its birth the nurse called my attention to "weak spells" which it had occasionally, accompanied by coldness of the skin, a feeble circulation and prostration, which continued for fifteen or twenty minutes, and were followed by a clammy perspiration. By the application of heat to the body and giving it a little brandy and water or other stimulant, it would revive.

I observed that these "spells" had a periodicity, occurring every two or three days, and considering them malarial, I gave the mother quinine and valerianate of iron, which, acting therapeutically through the milk, soon caused the "spells" to cease, and the babe became well and fat. I also gave it small doses of the elixir of cinchona for several weeks.

This child must have contracted this disease whilst in utero through the placental circulation, for being born in a perfectly healthy locality it was not exposed to any external malarial influence.

When labor began the quinine was stopped and was not resumed until the condition of the child required it, when it soon showed its anti-periodic action by completely arresting these "weak spells," for now the child is perfectly well.

Dr. R. P. Harris related a case of parallel character, which had occurred some years ago in a malarious neighborhood. The mother was under treatment before labor. The child had chills and fever when quite young and was treated through the mother.

W. H. H. GITHENS, Secretary.

DISCONTINUANCE OF THE "PROCEEDINGS" OF THE MEDICAL SOCIETY OF THE COUNTY OF KINGS.—As a circular tells us, with the completion of the eighth volume, this publication is discontinued by order of the society. Many will regret this action, for although it was always a quiet, unpretending publication, confining its material to its own proper work, its readers looked for its regular monthly appearance with the confidence of finding well-selected, vigorously put and valuable matter in its pages.

STATE MEDICINE.

STATE BOARD OF HEALTH OF CONNECTICUT.

BY DR. C. W. CHAMBERLAIN, SECRETARY.

MORTALITY IN JANUARY, 1884.

	HARTFORD.	NEW HAVEN.	MERIDEN.	WATERBURY.	NEW BRITAIN.	BRIDGEPORT.	NORWICH.	NEW LONDON.	MIDDLETOWN.
Total deaths	90	99	20	33	16	44	25	18	16
Monthly death-rate	21	16	13	16	12	15	12	16	15
Zymotics	31	12	6	8	4	6	4	7	3
Infantile	32	21	..	2	4	12	4	6	3
Nervous diseases	11	18	..	3	..	1	5	..	1
Heart diseases	2	8	..	3	1	1	2	2	1
Scarlet fever	1	..	..	3	1	..	..	..	..
Typhoid fever	1	3	3	1	1	..	2	2	1
Typho-malarial fever	..	..	1	..	..	..	..	..	..
Malarial fever	1	..	..	2	..	..	..	..	1
Diphtheria and croup	25	5	..	..	1	..	..	3	..
Whooping-cough	..	..	..	..	..	..	..	..	..
Diarrhœal diseases	..	2	1	..	..	4	..	..	..
Cerebro spi'l meningitis	..	..	1	1	1	1	..	1	..
Consumption	10	13	6	10	..	8	4	..	2
Pneu'ia and congs'n lung	8	6	4	2	1	4	..	..	3
Bronchitis	4	2	..	..	..	..	..	..	..
Old age	8	6	1	..	..	6	..	..	2
Railroad accidents	1	..	..	..	..	..	..	..	..
Accident and violence	2	1	..	..	1	1	1	2	1
In public institutions	8	..	..	..	..	..	..	..	3

With the exception of Hartford, the sanitary history of the month is exceptionally good. The highest death rate is 16, the percentage of zymotic diseases not large, nor the percentage of deaths of those under 5. The increase in the relative frequency of typhoid fever over malaria is shown by the ratio of deaths, 14 to 5. The cold weather is, perhaps, equally unfavorable to the causation of both types of disease, although the falling off in malarial diseases as the severe cold weather comes on is more marked than in typhoid, but the latter is not considered as a winter disease. No report has been made of winter cholera, although it reappeared in Providence early in the winter.

The death rate of Hartford is not materially decreased from that of December. The ratio of deaths from zymotic diseases and of infantile deaths also continues unfavorable. The mortality from diphtheria continues at the same rate it has steadily maintained since November, a little over 20 a month, and thus far in February the ratio has been the same. In 1883 there were 200 deaths from diphtheria, 234 from croup and diphtheria, now generally classed together.

Total mortality to date is 270, which is larger than the deaths from the whole State for some years, and, excluding the cases of croup, equal to the deaths from diphtheria in 1879 in the whole State. The epidemic of scarlet fever in 1882 and 1883, caused 90 deaths, and the disease has reappeared as shown by the table. If the deaths from diphtheria had been crowded into a few months instead of extending over the year, the impression would be so great that immediate action would result. That would have been a better showing for the city, for this steady persistency indicates unmistakably the existence of unsanitary conditions that cause it, rather than any epidemic influence, except such as has been caused by the local conditions that have favored its spread.

The mortality in 1882 from diphtheria was 47, or 63 from croup and diphtheria, showing that there has been an unusual prevalence for a long period. These epidemics are found associated with unsanitary conditions. An ordinance embodying the opinions of the city board of health upon some of the causes that can be remedied, which are also favorable to the spread of zymotic diseases generally, has been submitted to the Common Council for its action. The reappearance of scarlet fever is not an encouraging feature.

Typhoid fever is reported from Berlin; also from Willimantic, one case fatal. Diphtheria and scarlet fever are also reported, with one death from each from the latter place, and also measles as very prevalent. Measles are also reported from Ashford and Saugatuck, and as epidemic in Willington and Stafford. Whooping-cough is reported from Bloomfield, Hampton, Union, Thomaston, Saugatuck, South Manchester, and Avon, but not unusually severe.

Scarlet fever is more prevalent than last month. Cases are reported from New Canaan, one fatal, Robertsville, Westport, Greenwich, one fatal, Berlin and Haddam, and as quite prevalent in North Haven. From Dr. Griswold, of North Manchester, five cases in two families, of a very malignant type, are reported, three of which were fatal, in a neighbouring village. The doctor's opinion was that the infection was conveyed by paper rags. The cases are discussed more fully in another connection.

Diphtheria is reported from Manchester, Thomaston, Avon, New Canaan, Hampton, Westport, and Bloomfield—six cases, two of which were fatal. The only death from whooping-cough is also reported, but the cases were quite numerous.

Diseases of the nervous system have been unusually prevalent, as shown in the mortality table and in the different reports. Erysipelas is also reported much oftener than usual.

While lung fever is reported as prevalent quite generally, the indications are that the mortality will be prolonged into the spring months, as has been the case of late. Bronchitis is also more prevalent than usual. Lung diseases generally are reported as quite prevalent in Oxford. Lung fever is reported also from Greenwich, Berlin, New Canaan, Cheshire and other places. Malarial fevers show rather an increase over last month, as reported from Haddam, New Canaan, North Manchester, Thomaston, Willington, Westport, and Bloomfield, the frequency of cases somewhat in the order named, increasing from the first onward. Avon also reports a decided increase, and there is no decrease in the cases reported from the part of South Manchester where there has been so marked a prevalence for some months past. There appear to be more cases proportionately in that region than elsewhere during the cold weather, although much less than during the summer and autumn.

New Hartford reports only one death for the month, a child of four months old that inherited consumption. An instance of death from freezing is reported from Saugatuck. A case where a child was killed by soothing syrup is stated to have occurred in Willington. An unusual number of deaths from old age are reported from all parts of the State. Bridgeport reports six over 70, four of whom were over 80.

One singular feature is the unusual prevalence of diarrhœal diseases. Should this continue it would be an intimation to look out for cholera next summer. It is a bad time to clear up filth when an epidemic is present. The time, if prevention is to be accomplished, is before the appearance of the disease.

MEETING OF THE STATE BOARD OF HEALTH OF KENTUCKY.

The State Board of Health held its regular quarterly meeting at Frankfort on January 16, and had a joint meeting with the House Committee on Sanitary Regulations, in the hall of the House of Representatives. The members present were Dr. Thompson, of Henderson; Dr. Holland, of Louisville; Dr. Shackleford, of Maysville; and Dr. McCormack, of Bowling Green.

In his report as Secretary, Dr. McCormack reported that in 85 of the 117 counties of the State, efficient boards of health were organized, and are now engaged in making sanitary surveys of their respective counties. Small pox had been reported from five counties, and in each instance prompt restrictive measures had been resorted to, and the disease checked. The Committee on Legislation reported a bill giving increased powers to and defining more clearly the duties of local boards of health, and providing for the appointment of a health officer in each county. Also a bill providing for instructions in hygiene in all the public and incorporated schools of the State, and a bill amending the present law regulating the practice of medicine, requiring physicians to procure licenses from county judges, based on proper evidences of qualification, and have the same recorded in the county clerk's office.

These bills were presented to and examined by the above named House committee. The Board also asks an increase in its annual appropriation—from $2,500 to $7,500. It claims that its work is no longer an experiment, and that having demonstrated its usefulness in preventing and restricting epidemic and contagious diseases, and in diffusing information amongst the people in regard to the preservation of health, it should be furnished with a sufficient amount of money, that it may multiply its methods of collecting information, and enter fully upon the enlarged sphere which increased knowledge has opened up. New York gives its Health Board $20,000; Michigan gives $15,000; Illinois $12,000; some of the other States, $10.000; no State, excepting South Carolina and Kentucky, appropriating less than $5,000. As the members of the Board receive no compensation for their services, and use the money in sanitary investigations, and to pay actual expenses, the demand seems reasonable.

BOOK REVIEWS.

DIAGNOSIS OF "FUNCTIONAL MURMURS." By F. C. SHATTUCK, M.D.

We have received the interesting paper of Dr. F. C. Shattuck on the above subject, and as a whole can commend it for the care which has been exercised in collecting facts, and for the clear statement of the differential features between organic murmurs and those of inorganic origin; but we cannot coincide with him in the following statement, which we fear may mislead some who are not thoroughly familiar with the various cardiac murmurs.

He states: "As regards prognosis and treatment, a murmur, even if persistent, is of no importance to the patient, unless it either is, or after a reasonable time, say six months if you choose, becomes associated with other well-marked evidences of a disturbance of the balance of the circulation, above all, enlargement of the heart in some or all of its divisions."

In this the author has overlooked those numerous cases in which, for years, organic disease of the heart causes murmurs, without any evidence of a disturbance of the balance of the circulation, but in which the heart finally undergoes the same changes as in the more rapidly progressing cases.

These cases are certainly of importance to the patient, as, sooner or later, serious symptoms will be developed, though they may be delayed for five, ten, or even twenty years after the murmur has been discovered. During this time, the author's statement that "the murmurs are of no importance to the patient," might sometimes hold good just so far as the symptoms of any serious disease, which symptoms were not of themselves a source of inconvenience, might be of no importance to the individual (as it would not benefit him to know of them); but in other cases, a knowledge of the impending danger might greatly prolong life, by enabling the patient to avoid excitement and excessive exertion which would throw an unusual amount of strain upon the heart, and thus hasten hypertrophy and final dilatation.

E. F. I.

64 State St., Chicago.

DOMESTIC CORRESPONDENCE.

MICHIGAN COLLEGE OF MEDICINE.

EDITOR JOURNAL AMERICAN MEDICAL ASSOCIATION:

The fourth annual Commencement of the Michigan College of Medicine was held at Whitney's Opera-House, March 3, when 27 young gentlemen received the degree of Doctor of Medicine. The address was given by the Rt. Rev. S. S. Harris, Bishop of Michigan. He explained to the audience the duties and nature of the physician; demonstrated the virtues of the Hippocratic oath and told the large audience that they had also a duty to perform not only to their personal medical adviser, but to the profession

at large, and above all, that they should always pay their bills promptly. The degrees were conferred by the Hon. Sydney S. Miller, President of the Board of Trustees. The address to the graduates was given by Prof. Gastin, who, after reciting the education they had received, closed with practical advice for their future government.

The music for the occasion was furnished by Prof. Spiel, and was excellent. Floral gifts were given by the friends of the graduates, which were profuse in quantity and beautiful in arrangement.

After the close of the exercises, an elegant entertainment was given the alumni and invited guests by the Faculty, at the conclusion of which short speeches were made encouraging and giving good advice to the graduates.

The graduates were all males, and all were three course students. They had passed a thorough examination, both written and oral.

This college, although a junior, is determined that her graduates shall be well educated before being received for medical instruction, and equally determined that they shall be thoroughly educated in medicine before receiving the degree of doctor.

B.

EDITOR OF THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION:

Sir:—It is so very gratifying to be reproved by the venerable editor-in-chief of this journal for not having asked the prayers of the members of the Association for *more* than I did, that I am almost loath to suggest that if he will carefully read the proposed law I was so anxious to have the legislature of the State of New York given wisdom and courage (by prayer or otherwise) to enact, he will find that is "worth praying for."

As many others of the members of the Association may not know the precise scope of this contemplated law I present it herewith for publication. It is indeed a surprise for me to learn that the war that such boards as those of Illinois and West Virginia "can wage against medical ignorance and incompetence will never amount to more than light skirmishing along the outposts, and is hardly worth praying for;" nevertheless, I shall be very well satisfied if I can live to see skirmishing boards not only in New York, but in every other State as effectively armed as by the following:

AN ACT TO ESTABLISH THE MEDICAL FACULTY OF THE UNIVERSITY OF THE STATE OF NEW YORK, TO REGULATE THE LICENSING OF PRACTITIONERS OF PHYSIC AND SURGERY, AND TO FURTHER REGULATE THE PRACTICE OF PHYSIC AND SURGERY.

The People of the State of New York, represented in the Senate and Assembly, do enact as follows:

SECTION 1. On or before the first day of June, 1884, the Governor shall appoint the Medical Faculty of the University of the State of New York, to consist of nine (9) members, who shall be authorized practitioners of physic and surgery in this State, but none of whom shall be connected with any medical school or college; provided, that in the appointments made the representation of the several systems of medical practice recognized by the incorporated medical societies of this State shall be in the proportion of six, two and one, that is to say, the system having the largest number of practitioners to have six, that having the next largest to have two, and the remaining system to have one representative; and all persons desiring to enter upon the practice of physic and surgery in this State, after November 1, 1884, shall before doing so, comply with the provisions herinafter prescribed and obtain the license hereinafter provided.

SEC. 2. Of the nine members of the said medical Faculty, three shall serve, in the first instance, for three years, three for four years, and three for five years; and these terms shall be severally distributed by lot at the first meeting of the said Faculty. All appointments made in the Faculty at the expiration of the several terms fixed above shall be made uniformly for the period of five years each. All vacancies occurring in the said Faculty, from whatever cause, shall be filled before the next semi-annual meeting of the same, by the appointments by the Regents of the University of a practitioner of the system of practice that had previously been represented by the person occupying the seat so vacated; and in case the several State medical societies shall nominate physicians to fill such vacancies, the Regents shall appoint some one of the physicians so nominated.

SEC. 3. The said medical Faculty shall examine all applicants for license to practice physic and surgery in this State. The members thereof shall meet at least semi-annually, and at such meetings shall faithfully examine all candidates referred to them for that purpose by the Chancellor of said University, and each turnish him a report in writing of his opinion as to the qualifications and merits of each candidate, referring briefly to the degree of proficiency evinced by the applicant in all the several branches in respect of which he was examined; which opinion shall be by him denominated favorable or unfavorable. The President or Secretary of the Faculty shall have authority to admiaister oaths, and the Faculty to take testimony in all matters relating to its duties, and any false statement made under an oath so administered shall subject the offender to prosecution for, and on conviction, to punishment for perjury.

SEC. 4. Such examination shall be in anatomy, physiology, histology, pathology, theory and practice of medicine, chemistry, surgery, obstetrics, materia medica and therapeutics, and such other branches in the several departmeats of medical science as the said Faculty may agree upon, subject to the approval of the Regents of the University. The questions forming such examinations shall be the same for all classes of candidates offering themselves, with the exceptions of the departments of materia medica and therapeutics, in which branches the questions for each candidate shall be prepared by the representatives in the Board of Examiners, of the system of practice to which such candidate wishes to be licensed.

SEC. 5. The orders of the Chancellor addressed to the medical Faculty and the decision of the Regents of the University in each case shall be attached to the written reports of the examiners, and shall thereupon become, and forever after be a part of the public records of said University.

SEC. 6. Any person, on paying twenty-five dollars into the treasury of the University, and on applying to the Chancellor for the aforesaid examination, shall receive an order addressed to the aforesaid medical faculty, instructing them to examine the candidates at one of the regular semi-annual examinations, provided that proof satisfactory to the Chancellor is first given that the candidate is over twenty-one years of age, of good moral character, and has received a diploma issued to him or her, conferring on him or her the degree of doctor of medicine from some legally incorporated medical college held to be in good standing by the said medical faculty.

SEC. 7. The Regents of the University, after finding that the members of said faculty participating in the examination have given an unanimous opinion in favor of a candidate, and that such examination has been a satisfactory test of the qualifications of said candidate, shall issue to him or her a license to practice physic or surgery in the State of New York, for which license the candidate shall pay to the University the further sum of fifteen dollars.

Said faculty may refuse to recommend a license to individuals guilty of unprofessional or dishonorable conduct. and for like

cause, after giving the accused an opportunity to be heard in his or her defense, the Regents of the University shall revoke said licenses.

SEC. 8. The moneys paid to the University under the provisions of this act, shall be appropriated by said Regents for, and shall defray the expenses incurred under the provisions of this act.

SEC 9. The medical faculty shall meet on the first Monday of November, 1884, at the University in the city of Albany, and seven members thereof shall then and thereafter constitute a quorum, and shall at once organize by the election of a president and secretary, and such other officers as may then be determined, and then and thereafter adopt such rules and regulations, not in conflict with the provisions of this act, as may meet with the approval of the Regents of the University; and shall forthwith proceed to the examination of all such applicants as shall then present themselves with the order referred to in section six of this act.

SEC. 10. Subsequent to the first day of November, in the year 1884, every person (except such as have before such date lawfully registered pursuant to the laws of the State in force at the time of the passage of this act), after complying with sections 6 and 7 of this act, shall, before commencing to practice physic or surgery, register in the clerk's office in the county where he or she practices or intends to practice physic or surgery, in a book to be kept by the said clerk, his or her name, residence and place and date of birth, together with the date of his or her diploma and by what institution granted, with the date of his or her license to practice physic or surgery within this State; at the same time the person so registering shall exhibit both the license and the diploma herein required to the clerk, and subscribe and verify by oath or affirmation, before a person duly qualified to administer oaths under the laws of this State, an affidavit containing a plain statement of all the facts as aforesaid, including his or her age, and shall file said affidavit and copy of said diploma with said clerk; said county clerk to receive a fee of twenty-five cents for such registration, payable by the person so registering. Nothing in this section shall be so construed as to prohibit medical consultation in the different counties of the State between legally qualified and registered physicians of this and neighboring States.

SEC. 11. A person who shall willfully swear falsely to any statement contained in the affidavit required by the tenth section of this act shall be deemed guilty of and subject to conviction and punishment for perjury; and a person who violates any of the other provisions of this act, or who shall practice physic or surgery in this State under cover of a diploma unlawfully issued or illegally obtained, or without a license as provided for in this act, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not less than two hundred and fifty dollars nor more than five hundred dollars for the first offense, and for each subsequent offense by a fine as aforesaid and by imprisonment for not less than thirty days and not more than six months. The fine when collected shall be paid, one-half to the person or corporation making the complaint, the other half into the county treasury of the county where such conviction shall be had.

SEC. 12. For the purpose of this act the words "practice physic or surgery" shall mean to annex the letters "M. D." to one's name or to suggest, recommend or prescribe, direct or employ, as a matter of business or for a fee, for the use of any person, any drug, medicine, appliance, apparatus or other agency, whether material or not material, for the treatment, cure, relief or palliation of any real or supposed ailment or disease of the mind or body, or for the treatment, cure or relief of any wound, fracture or other bodily injury or infirmity, or any deformity.

SEC. 13. Nothing in this act shall apply to commissioned medical officers of the United States army or navy, or of the United States marine hospital service, nor to any members of the house staff of any legally incorporated hospital during the term of their service as such.

SEC. 14. So much of chapter seven hundred and forty-six, laws of eighteen hundred and seventy-two; chapter five hundred and thirteen, laws of eighteen hundred and eighty; chapters one hundred and eighty-six and six hundred and seventy-nine, laws of eighteen hundred and eighty-one, as are inconsistent with this act, and all other acts and parts of acts inconsistent with this act, are hereby repealed.

Very respectfully, your obedient servant,

ALBERT L. GIHON, Medical Director U. S. Navy.

U. S Naval Hospital, Washington, D. C, March 15, 1884.

NECROLOGY.

BATEMAN, BENJAMIN RUSH, M.D., was born in Cedarville, Cumberland county, N. J., on March 4, 1807, and died July 23, 1883, in his 77th year. He graduated from Jefferson Medical College in 1828, and immediately commenced the practice of medicine in his native town, succeeding his father, the Hon. Ephraim Bateman, M.D., who was at that time United States Senator from this State.

Dr. Rush Bateman, as he was generally known, by his energy and zeal soon built up a very extensive practice, and for forty years, day and night, cheerfully responded to *every* call for his professional services. He was an invaluable citizen, and always foremost in every good work, always leading in every benevolent enterprise. He was widely known throughout the State, and occupied at different times many positions of honor and trust. As a wise and successful practitioner he ranked among the first. He became a member of the American Medical Association in 1853, and was a Fellow of the New Jersey Medical Society, having been its President in 1866, and was an honorary member of the Cumberland County Medical Society. The latter Society, at his death, passed the following resolution:

"*Resolved*, That this Society here record a sense of their great loss of one who, though he had reached a ripe age, was ever young, ever genial and companionable, and who always added interest to our meetings."

A letter written by the distinguished Dr. Gross to Dr. Ephraim Bateman, after the death of his father, will convey some idea of the impression the latter's character always made upon his friends and acquaintances:

"PHILADELPHIA, Aug. 1, 1883.

"MY DEAR DOCTOR:—I am grieved to hear of the death of my kind friend, Dr. Bateman. I saw him only a few years ago, and he was then in excellent health, with a countenance benignant, genial, and beaming with kindness. He must have been essentially a good man, and his death must be regretted by his many friends and fellow citizens. Thus we go. All must die; none can escape the inevitable lot. Very truly, your friend,

"S. D. GROSS."

GEO. T. WELSH, M.D., New Jersey.

DR. C. H. VON KLEIN, formerly of Hamilton, has removed his residence to Dayton, Ohio.

MISCELLANEOUS.

To the Members of the Medical Profession of the State of Tennessee:

The fifty-first annual session of the Medical Society of the State of Tennessee will convene at Chattanooga, Tuesday, April 8, 1884.

The attention of the members is called to the fact that at the last meeting there were no essayists appointed for this meeting, and the society will expect the members to come prepared with volunteer papers to present to the meeting.

The committee on changes in the constitution will recommend that permanent members and delegates present at the sessions of the society pay a tax of $2, and permanent members not in attendance pay $1 and be entitled to receive the Transactions. These fees being in lieu of the present tax of $3 which has heretofore been collected whether the members were in attendance or not.

Reputable members of the profession throughout the State are invited to become members. Every physician who values his own interest and that of the people who trust their health and lives in his care should take every legitimate method of advancing the individual and general intelligence of the profession, and this can be done to a large degree by these pleasant re-unions and discussions of our every day work at the bedside. The earnest coöperation, therefore, of every physician in the State is needed and should be given to the State Medical Society, whose laudable object is to elevate the profession and advance the medical reputation of the State. The Society, now grown old in years and honors, has an enviable history, and the future should equal if not excel the past.

The N., C. & St. L. railroad will sell round trip tickets at four cents a mile on April 7, 8 and 9, good for return passage until the 12th.

The L. & N. railroad will sell round trip tickets at same rates at their stations to Nashville. These tickets must be shown at Nashville to purchase the tickets over the N., C. & St. L. railroad to Chattanooga.

The L. & N. will, however, sell round trip tickets at Memphis via McKenzie and Nashville to Chattanooga.

These reduced rate tickets can be purchased during the business hours of the day at stations in Tennessee only. These tickets must be purchased in all cases, as no certificate of membership will be recognized as claim for reduced return passage.

For further information address the Chairman of the Committee of Arrangements, Dr. G. A. Baxter, Chattanooga. C. C. FITE, Secretary.

Nashville, Tenn.

INTERNATIONAL OTOLOGICAL CONGRESS.—The next international congress of those interested in the treatment of diseases of the ear, is to be held in Basle, from September 1st to the 4th, 1884. Communications concerning it may be addressed to M. le Dr. Burckhardt-Merion, at Basle.

NEW BOOKS.

Long, H. De l'adénome du sein et de son traitement parles injections iodées. 4to, 43 pp. Montpellier: Boehm et fils.

Martin, P. F. De la compression du nerf radial par un cal vicieux. 4to. pp. 72. Lille: Darel.

Mathieu, X. De l'exostose sous-ungéale. 4to. 47 pp. Montpellier: Boehm et fils.

Millet-Robinet, Mme. et Alliu, E. Le Livre des jeunes méres la Nourice et le Nourrisson. 18mo. pp. xii 376., fi48 ,g. Paris: Chaix.

Molinié, J. Des quelques indications dans le traitement de la fievre typhoide et des principaux mozens des les remplir. 4to 114 pp Montpellier: Boehm et fils.

Négre. C. Du torticolis fonctionnel. 4to. 52 pp. Montpellier: Boehm et fils.

Olivier, A. De la pneumonokoniose anthracosique. 4to. 55 pp. Montpellier: Boehm et fils.

Paraut, L. Traitement du trichiasis et de l'entropion par la tarsoplastic 4to. 91 pp. Lyon: Buc et Demaison

Péringuey, J. L. De la pneumatoruétrie enrisagée comme moyen diagnostic. 4to. 54 pp Bordeaux: Durand.

Peyre de Fabreques G. de De l'intervention obstretricale dans la presentation du siége décomplétée (mode des fesses) aprés, l'engagement. 4to 71 pp. Montpellier: Cristin, Serre et Ricome.

Pezet, P. De la matiere toxique à travers les siecles. 8vo. 124 pp. Montpellier: Boehm et fils.

Poirson, A. A. Contribution à l'etude des plaies de la cornée au pont de vue du pronostic et des responsabilites judiciares. 4to. 50 pp. Lyon: Waltener et Cie.

Privat, G. Considerations sur l'astigmatisme 4to. 72 pp. Montpellier: Cristin, Serre et Ricome.

Revue generale de physiologie 1883. 67 pp. Paris: Quantin.

Serre, St. H. De l'entérectomie et de l'enterorrhaphie dans les hernies étranglées suivies de gangrene. 8vo. 30 pp. Paris: A. Delahaze et Lecrosnier.

Simonin. Assistance publique de Meurthe et Moselle, 1882. 8vo. 82 pp, Nancy: Berger, Levrault et Cie.

Wernher, A. Zur Impffrage. Resultate der Vaccination und Revaccination vom Beginn der Impfung bis heute, nach der Quellenbearbeitung. 8vo. VII, 312 pp. Mainz: V. Zabern.

Vierordt, Herm. Die einfache chronische Exsudativ-Peritonitis 8vo. V, 141 pp. Tübingen: Laupp.

Talon, A. La Paralysie générale à l'asile des aliénés de Marseille. 4to. 100 pp. Montpellier: Hamelin freres.

Troisier, Damaschino, Millard et Roques. Communications sur la pseudo-paralysie syphilitique infantile faites à la Société médicale des hopitaux. 8vo. 15 pp. Paris: Alcan-Lévy.

Vincent, J. La Fiévre jaune épidémies de 1878 et de 1881 au Sénégal. 4to. 40 pp. Montpellier: Groltier et fils.

Wertheimer, E. Développement du foie et du systeme porte abdominal. 4to. 98 pp. Lille: Danel

Müller, Frdr. üb die diagnostische Bedentung der Tuberkelbacillen. 8vo 7 pp. Würzburg: Stahel.

Orth, Johs Compendium der pathologisch-anatomischen diagnostik, uebst anleitg zur ausführg. v. obductionem, sowie v. pathologisch-histolog. Untersuchgn. 3 Aufl. 8vo. xx. 634 pp. Berlin: Hirschwald.

Otto, Dr. Künstliche Unfruchtbarkeit. 8vo. 20 pp Neuweid Heuser.

Passauer. die Direktiven f. das Verfahren vei Bekämpfung der contagiösen Auger-Entzündung. 8vo. 30 pp. Gumbinuen Chrzescinski.

Rischmüller, Heinr. üb die Scharlachepidemie zu Göttingen im J. 1881-82. Inaug Dissert. 8vo. 37 pp. Göttingen: Vandenhoeck & Ruprecht.

Rodenstock, Jof. die Brille, deren Anschaffg u. Gebrawch. 8vo 28 pp. Würzburg: Kellner.

Schemata zum Einzeichnen v. Befunden bei Untersuchung der Brust u. Bauch. Organem. Skeletteinzeichnung. 8vo. 48 Taf. Tübingen: Laupp.

Ibid. Zum Einzeichnen v. Befunden bei gerichtsärtzlichen Untersuchungen am Gehirn. 8vo. 48 Taf. Ebd.

Ibid. Am Schadel. 8vo. 48 Taf. Ebd.

Ibid bei laryngo-rhinoskopischen Untersuchungen. 8vo. 45 Taf. Ebd.

Ibid. bei ophthalmiatrischen Untersuchungen. 8vo. 48 Taf. Ebd.

Ibid. zu Temperatur, Pulse u. Respirations-curven, nebs Temperaturbellen. 8vo. 48 Taf. Ebd.

Schultz, Bernh. Signo. Lehrbuch der Hebammenkunst. 7 auflg mit 90 Holzschn. 8vo. xxiii, 368 pp. Leipzig: Engelmann.

Schwalbe, Carl. die Radicale Heilung der Unterleibsträche. 8vo. 58 pp. Berlin: Gerschel.

Duncan, J. Matthews. On Sterility in Women; being the Gulstonian lectures delivered in the Royal College of Physicians. Phila: P. Blakiston, Son & Co. 8vo. 136 pp. Cloth, $2.

Gowers, W. R. Diagnosis of Diseases of the Spinal Cord. 3rd ed. Phila.: P. Blakiston, Son & Co. 8vo. 92 pp. Cloth, $1.50.

Michener, E., Stubbs, J. H, and others. Hand-Book of Eclampsia; or notes and cases of puerperal convulsions, comprising all the cases which have occurred during the present century within a radius of several miles around Avondale, Chester county, Pa., so far as can be ascertained. Phila.: F) A. Davis, 12mo. 368 pp. Cloth, 75.

Ribot, Thevodor. The Diseases of the Will. From the French by J. Fitzgerald. New York: J. Fitzgerald. 8vo. 45 pp. 15 cents. (Humboldt lib. No. 52.)

Smith, Eustace. The Wasting Diseases of Infants and Children. 4th ed. enl. Phila.: P. Blakiston, Son & Co. 8vo. 372 pp. Cloth, $3.

Bazy, P. De l'intervention chirurgicale dans les tumeurs de la vessie chez l'homme. 8vo. 55 pp. Paris: Doin.

Blanc, L. Contribution à l'etude expérimentale des lésions du foie dans quelques empoisonnements aigus. 8vo. 49 pp Lyon: Pitrat Aîné.

Breton, H. A. E. De quelques complications rares sur l'amygdalite phlegmoneuse. 8vo. 63 pp. Paris: Davy.

Cherbetian, M. Etude sur un cas de fibrome malin de la fosse iliaque chez l'homme. 8vo. 46 pp. Paris: Davy.

Dauchez, H. Descriptions vaccinales généraliséur (vaccinides et de quelques dermatoses suscitées par la vaccination. 7vo 145 pp. Paris: Delahaze et Lecrosnier.

Ducasse, L. De la peritoine par perforation intestinale dans le cours de la fiévre typhoide. 8vo. 58 pp. Paris: Davy.

Dupré, P. Du traitement des hémarthroses du genon par l'im mobilisation et la compression. 8vo. 39 pp. Paris: Davy

Goullioud, P. Des osteites du bassin au point de vue de leur pathogénie et de leur traitement. 4to. 134 pp. Lyon: Waltener & Co.

Landry, A. Contribution à l'etude du cancer du sein chez l'homme 8vo. 47 pp. Paris: Davy.

Leblond, A. Note sur la fécondation artificielle, à propos d'un jugement du tribunal de Bordeaux. 8vo. 11 pp. Paris: Lauweryns.

Luc, H. De la tuberculose de la conjunctive comparée au lupus de cette magueuse, contribution à la différenciation clinique de ces deux affections, 8vo. 39 pp. Paris: Davy

Marie, P. Lathyrisme et béribéri. 8vo. 11 pp. Groupy et Jordan.

Santon, J. De l'hérédité morbide et de ses manifestations vésaniques dans la paralysie générale. 8vo. 82 pp. Paris: Delahaye et Lecrosnier.

Balandin, J. Klinische Vorträge aus dem Gebiete der Geburtshilfe u. Gynæcologie auf Grundlage eigener anatomischer u klinischer Beobachtungen. 1. Heft mit 12 lith. u. 1. 4th V, 127 pp. St. Petersburg Ricker.

Haas, Herm. Die acute Endocarditis. Fine klinische Studie 8vo. 107 pp. Prag, Calve.

Heitzmann, J. Spiegelbilder der gesunden und kranken Vaginalportion und Vagina. 2. Abth. Mit 9 chromo-lith. Tafeln und 12 Holzschn. 8vo. 101 to 228 pp. Wien, Braumüller.

Hübner. Die Diphtheritis und ihre Behandlung. Nach eigenen Erfahrungen am Krankenbette. 2. Auflage. 8vo. III, 20 pp. Berlin, F. Luckhardt.

Lübben, K. H. Beiträge zur Kenntniss der Rhön in medizinischer Hinsicht. 8vo. 107 pp. Mit 3 Steintaf. Weimar, Gotha-Conrad.

Wollny, Ewald. Ueber die Thätigkeit niederer Organismen im Boden. 8vo. 26 pp. Braunschweig, Vieweg & Sohn.

Changes in the Medical Corps of the Navy for the Week Ending March 15, 1884.

P. A. Surgeon F. H. Terrill, to coast survey steamer Hassler.

P. A. Surgeon R. H. McCarthy, from the coast survey steamer Hassler, and wait orders.

Official List of Changes in the Stations and Duties of Officers Serving in the Medical Department United States Army, from March 8, 1884, to March 14, 1884.

Billings, John S., Major and Surgeon, granted leave of absence for one month, with permission to go beyond sea, to take effect April 1, 1884. (Par. 6, S. O. 61, A. G. O., March 13, 1884.)

Heizmann, Charles L., Captain and Assistant Surgeon, leave of absence extended three months. (Par. 9, S. O. 57, A. G. O., March 8, 1884.)

Wales, Philip G., appointed to be Assistant Surgeon, with the rank of First Lieutenant, to date from February 7, 1884, vice Brewster, resigned. (Mem., A. G. O., March 10, 1884.)

Kundler, Wm. H., First Lieutenant and Assistant Surgeon, assigned to temporary duty at Fort A. Lincoln, D. T. (Par. 3, S. O 26, Headquarters Department of Dakota, March 8, 1884.)

Fisher, Walter W. R., and Polhumer, Adrian S., First Lieutenants and Assistant Surgeons, assigned to duty in Department of California.

Stephenson, Wm., Borden, Wm. C., and Chapin, Alonzo R., First Lieutenants and Assistant Surgeons, assigned to duty in Department of the Platte.

Robertson, Reuben L., and Edil, Guy L., First Lieutenants and Assistant Surgeons, assigned to duty in department of Texas.

Crosby, Wm. D, First Lieutenant and Assistant Surgeon, assigned to duty in Department of Arizona.

Gandy, Charles M., First Lieutenant and Assistant Surgeon, assigned to duty in Department of East.

Pilcher, James E, First Lieutenant and Assistant Surgeon, assigned to duty in Department of Dakota. (Par. 4, S. O. 55, A G. O., March 6, 1884.)

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